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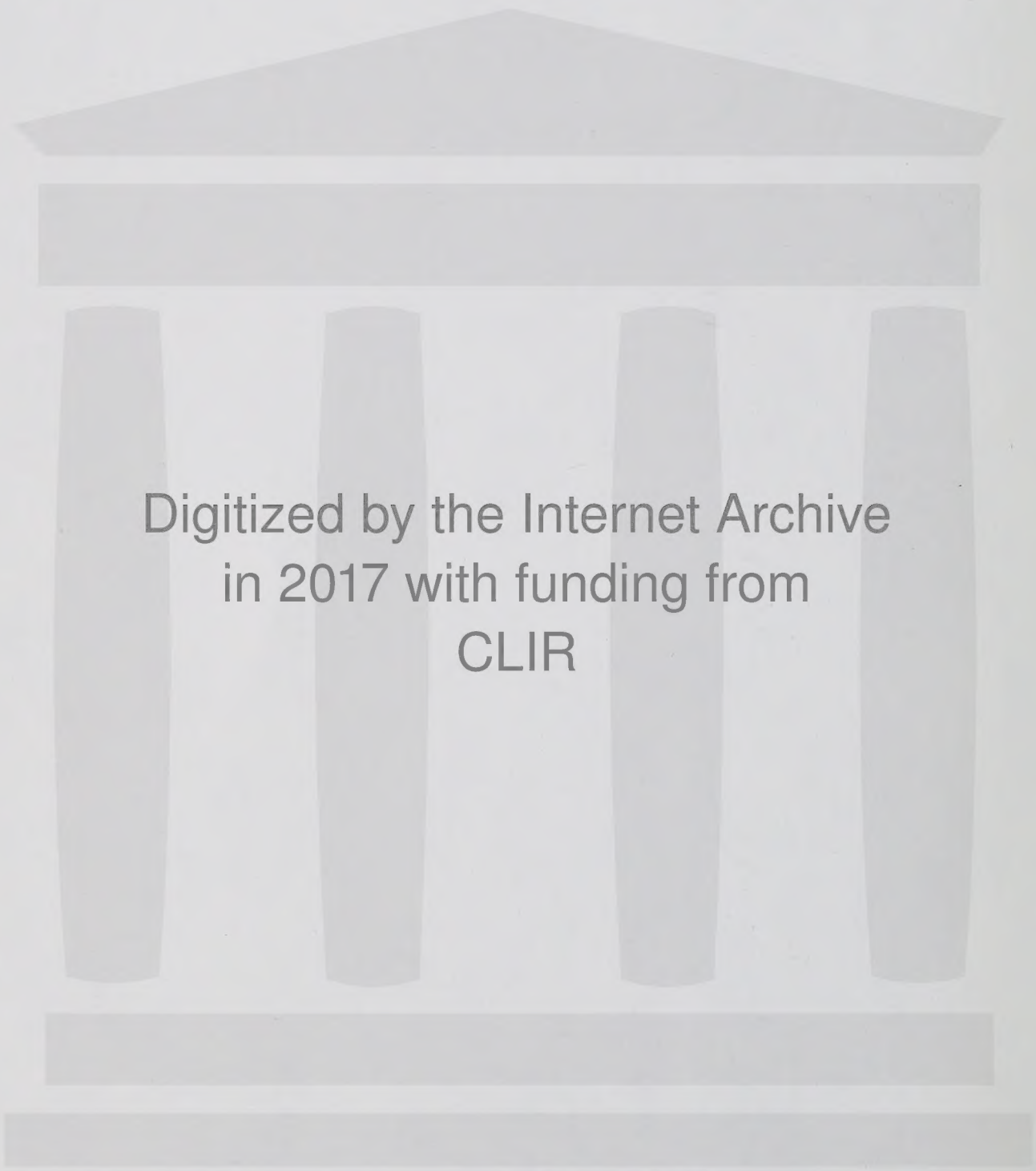

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Greer, A.

1975

Journal

Texas

Mexico

NORTHEASTERN MEXICO 23 APRIL – 12 MAY, 1975

The purpose of this trip is two fold: (1.) to collect the rare, legless, blind, burrowing lizard *Anelytropsis papillosus* and (2.) to collect those species of neotropical plethodontids that occur at the periphery of the radiation in northeastern Mexico.

The people on the trip were as follows: Allen Greer (A.G.), Philip Greer (P.G.), Sam Sweet (S.S.S.) and Jim Hanken (J.H.)

The trip was financed by the MVZ, Dave Wake's NSF grant and by personal funds. All specimens are in the Museum of Vertebrate Zoology, Berkeley, Calif. (MVZ).

23 April — Left Berkeley at 3:30 PM and took Hwy 24 to Interstate 580 and then onto Interstate 5 South. Stopped at junction of Interstate 5 and Hwy. 58 for dinner at about 9:00 PM. After dinner took Hwy 58 east through Bakersfield and Tehachapi Pass. Stopped for the night on a side road just NW of Mohave. Wind was blowing and night was cool.

24 April — Awoke at 7:00 AM and were on the road by 7:15 PM. Drove into Mohave for breakfast. Left Mohave going east on Hwy 58 to Hwy 395 which we took south to I 15. From I 15 we hit I 10 and stayed on this to the

present which is the roadside rest in the hills of the Texas Canyon. Stopped for lunch in Blythe around 1 PM and for dinner in Tucson around 7 PM. Stopped for the night at 10:30 PM. Looked around the rock outcrops on the south side of the road for about 45 minutes but found nothing - no snakes nor lizards on the rocks.

25 April

Awoke at 7:05 AM and got on the road at 7:30 AM. Had a Cassin's Kingbird around the camp as we loaded up. Drove into Wilcox for breakfast. Continued east on I 10 and had lunch in Las Cruces about 1:00 PM. Went through El Paso and then dropped south on U.S. 90 at Van Horn. Had dinner at Marfa at 7:30 PM and then right drove from there to the Pecos River scenic overview where we spent the night stopping about 1 AM.

The night was hazy with a full moon; warm but with a fairly stiff and even wind. Found the following snakes in the south (Hwy 90) between Marfa and the Pecos River.

Pituophis melanoleucus : 3.3 miles E. junct. Hwys 90 & 385 in Marathon. Not saved.

Crotalus atrox : 27.2 miles E. junct Hwys 90 & 385. Not saved

Masticophis taeniatus : 4.0 miles E.

of east edge of Sanderson; not saved.

Crotalus atrox : 11.6 miles east of Dryden; not saved.

Elaphe : 0.6 miles west of Cedar Station. Picked up alive but had been hit and died during the night. The vegetation on either side of the road at the spot appeared to be short grass range with no trees and few, if any, bushes. Catalogued by J. Hanson. Photographed after death.

Earlier in the day, before dinner, we picked up a Phrynosoma 15.2 mi. S.E. Valentine, Presidio Co., Tex. Catalogued by S. Sweet. Found on the side of the road, perhaps had been basking. Short grass range on either side of the road; no trees or bushes. Photograph of specimen.

26 April

Awoke at 8:00 AM to a complete overcast and a very thin aerosol mist-like haze in the air. Wind still blowing strongly - Had breakfast in Del Rio and then drove back west of town on Hwy 90 to Four Mile Cave which is 3.5 mi. NW Del Rio on Hwy 90. Sam and

Jim went down into the cave and found the following:

Syrrhaphus near the mouth of the cave at the bottom of the sink hole.

Eurycea sp. in the water well into the cave. Grayish white dorsally with bright red gills. Stage 3 according to Sam.

Philip and I looked around the area above ground and saw a lot of new birds and I found the following.

1♂-2♀✓

Sonora episcopa - 2 individuals both under the same rock on the side of a draw above the cave entrance.

♀ appears to be gravid.

Color: Light olive green dorsally and pale yellowish-white (the larger specimen) or nearly immaculate (the smaller specimen).

Both snakes exuded a whitish liquid from the vent when picked up.

Habitat shot & shot of the larger specimen.

Left this locality and drove to San Felipe Springs or just below it where Hwy 90 crosses the out flow from the Springs. Took a swim, washed some clothes

and pickled the specimens obtained to date. Got one Cnemidophorus sulcis tooling along the pasturing area above the spring outflow. Philip saw another and we saw two more later on the road to the Springs proper to fill water bottles.

Did some shopping in ~~Laredo~~ Del Rio and then headed east along U.S. Hwy. 277 toward Laredo. Stopped at Sycamore Creek and in Kinney Co. on the north side of the road & the east side of the creek I got the following:

3

Thamnophis proximus : found in a moderately deep depression with an isolated pool of water just next to the flowing water of Sycamore Creek.

Color: Head spot and anteriormost part of mid-dorsal stripe pale yellow with a faint orange wash, remainder of mid-dorsal stripe dirty orange; lateral stripe pale beige; dark color between mid-dorsal & lateral stripe dark brown; dark color below lateral stripe & above ventrals olive green; venter very pale green.

Also saw, but did not collect, Cnemidophorus sp., Sceloporus sp. and Holbrookia.

Continued on east on Hwy 277 through Eagle Pass and on the road between Eagle Pass and Carrizo Springs we found the following Phrynosoma both AOR and DOR.

(1.) 23.7 miles W. Carrizo Springs Center but in Maverick Co. DOR but kept for a specimen.

(2.) 13.8 miles W. Carrizo Springs Center, Dimmit Co. : a specimen AOR which was kept and a DOR individual not retained.

(3.) 11.8 miles W. Carrizo Springs Center, Dimmit Co. DOR but saved.

It would appear from this afternoon's results and from yesterday afternoons results that Phrynosoma like to bask at the edge of the road during the late afternoon.

Picked up Hwy 83 out of Carrizo Springs and took it all the way in to Laredo. Picked up a DOR Crotalus atrox 57.2 miles ~~S~~ SE of Carrizo Springs by road on Hwy 83. Time 9:15 PM

10:00-10:30 PM ca

Had dinner at La Mexicana restaurant in Laredo: A local Mexican family affair that was very good. Drove out north of town on I 35 + Hwy 83 to the first rest stop to spend the night. Wind blowing a steady subgale as seems to be usual in these parts.

27 April

Awoke at 7:30 AM and were on the road back into Laredo at 8:10 AM Got a couple of photographs of a Scissor-tailed Fly catcher. Drove into Laredo for breakfast and after doing some shopping we headed for Nuevo Laredo and the border. We got turned down, however, because of no metal liscense on the car. Sam also got turned back due to his long hair.

After this Rejection we headed southeast along the border hoping to get in at one of the many border crossings. We tried Falcon and Roma Los Saenz but got turned back at each place because of the improper liscence of the

car. Between Falcon & Roma we even cut Sam's hair (photo) but to no avail. We stopped at two roadside rests between Laredo and Roma Los Saenz and at each locality one Cnemidophorus Sexlineatus was shot. The first was shot by Sam approx. 1 mile N. Lopeno, Zapata Co. and the second was shot by me approximately 6 miles NW Roma Los Saenz, Starr Co both on Hwy 83.

4 Cnemidophorus sexlineatus : approx. 6 miles N.W. Roma Los Saenz, Starr Co, Texas via Hwy 83.

After the set back at Roma we decided to head onto Brownsville. Stopped at Rio Grande City to call Alice Landauer & let her know our problem and then proceeded on to Bentsen - Rio Grande State Park which is S.W. of Mission on Hwy 83. On the way there we stopped at the following two localities and collected.

(1.) 0.6 miles W. by Hwy 374 of Perezville (measured from the junction of Hwy 374 and farm rd. 1427) or 2.4 miles W. by Hwy 374 of Palmview (measured from the junct. of Hwy 374 and farm road 2062). Hidalgo Co.

The locality is the S.E side of a canal & road. There is much trash & debris in a

Scrub forest and most were found under the boards, palm fronds, etc. that covered the floor. Sam caught everything found at this locality as follows.

Eumeces : 7 + 2 that got away. Many in palm litter

Sonora episcopa : 2 Both have darker dorsal areas on the head and one has a similarly colored neck ring connected by a dark longitudinal stripe to the dark dorsal coloring the head. Under mesquite log together.

Gopherus berlandieri : 1 ♂. Photo

(2.) A few hundred yards further east down loop road 374 we stopped at another pile of trash + debris - more metal in this one and trashier looking. Sam found 1 Hemidactylus turcicus.

Went on into Bentsen - Rio Grande State Park, found a campsite and cooked dinner. Then went back out to a pond just below the entrance to the park to collect water snakes and frogs.

Pond just below the entrance to the Bentsen - Rio Grande State Park Habitat photo.

Collected the following along the grassy

west shore of the pond.

Bufo marinus : 1 collected by Sam Sweet on a spit of mud extending out into the lake. Has a charming chirruping - like release call which it gave frequently in the bag.

5 ✓ Bufo valliceps : I caught one, and Sam caught one. ~~and Jim Hunter caught two~~. The specimen I caught was near the water.

6-~~12~~ 11 ✓ Rana berlandieri : I caught 6, Sam caught 12 and Jim Hunter got 2. Most of these were either in the water or at the edge of the water. Curiously the frogs, especially the larger ones of which several got away, hopped toward higher ground rather than toward the water. This may have been because the water snakes were in the shallows feeding. Many of the frogs are transforming (tails yet) or are recently transformed. Only a couple of really large frogs were seen and Jim caught one of these.

12 ✓ Natrix rhombifera : I caught one large one and Sam caught a second. I missed a smaller specimen. All three animals were hunting in the shallow at the west end of

the pond.

13-14 ✓ Storeria dekayi : 2, both caught within 1 foot of the water's edge w thick but short trailing grass. One of these two was almost in the water.

Came back with Bentsen - Rio Grande State Park and Jim bagged two Bufo valliceps hopping around the camp grounds. I later found another specimen around one of the restrooms.

15 ✓

28 April Awoke about 7:30 AM and packed up. Went for a quick shower and a tour of the campground to check out all of the neat birds: Chachalaca, White-fronted Dove; Golden-fronted Woodpecker, Lichtenstein's Oriole; Curve-billed Thrasher, Inca Dove.

Left the state park and took the Gopherus berlandieri back to its locality to release it. Photo taken.

Continued east on Loop Rd. 374 and got a big Pituophis melanoleucus ROR on the east edge of Palmview or 2.8 miles west of Conway & 10th St. in Mission on Loop 374. Hidalgo Co.

Entered Brownsville on Hwys 83 & 77 and Stopped at an abandoned, delapidated house on the Resaca del Rancho Viejo, Rts. 83 & 77, Brownsville, Cameron Co, Texas.

Hunted around the house under the trash and boards and also in the field west of the house which was largely knee-high grass with open areas — the whole field bordered on the west by acacias from the resaca still further west. Got the following.

16-19 ✓ Cnemidophorus gularis : Sam got two, Phlyp got one and I got three. These last four animals carry these field numbers.

Generally saw these animals at the interface between the open areas and either the grass or the acacia trees.

20 ✓ Eumeces tetragrammus Sam got one under a railroad tie and I got one in palm detritus.

Sceloporus Sam got one

in a large tree near the "driveway."

Masticophis taeniatus : I saw one ~~between~~ at the edge of the acacias and the road. About 2½ feet in length. Reddish rust color on the head, light olive green ground color, and two longitudinal light stripes.

Drove into Brownsville and called around to the car rental agencies to get their prices for vehicles in Mexico. Later called Alice who said the plates for the vehicle had been sent to Sanborn's via registered airmail special delivery. Now all we have to do is wait & hope the plates actually gets here in time to do us any good. Is this the end of the problems or another chapter.

Left Brownsville driving east on Texas Hwy 48 and stopped at a spot on the north side of the road miles west of the junction of Hwy 48 & on Hwy 48.

The locality is a long, raised hammock area in the middle of a low, flat area behind the sea front.

Saw a Cnemidophorus sp. & a Scelloporus specie. Also saw several Gopherus berlandieri

headed into their pallets. These were in the hammocks covered by acacia or thorn scrub on the north side of the basically west-east running hummock. The tortoises were also headed into their pallets. There were many unoccupied pallets and all of the tortoise we saw had a good 1/3 - 1/5 of the rear part of the shell hanging over the pallet.

Later checked an area of trash along Texas Hwy 4 east of Brownsville and found nothing. After this checked along an irrigation canal just South of Hwy 4 and paralleling it and saw no herps except for about 7-8 frogs / Rana Some of which were as large as Green Frogs. Got none of these, however, as they were very wary.

Drove back into Brownsville and ate dinner at Bonanza where chicken fried steaks were on sale at $1.00 a shot. After dinner drove west of town and pulled off in a grove of trees where a house had once been. The night was passed very pleasantly save for the slight interruptions and inconvenience caused by two different Sheriffs' patrols asking what we were doing; a swarm of the most fierce mosquitos I have ever seen; a wind storm of 30 minute duration that approached hurricane

proportions, and a semi-trailer truck that was parked opposite us on the street with the motor running for the last four hours of our stay. May Dick Arenson of the university garage be consumed by mosquitoes on his final day.

29 April

Awoke at 10:00 AM to a farmer plowing his field next to us. Got off and went to Harlingen for breakfast which we finished around 11:00 AM. From Harlingen we drove back south again to pick up Hwy 281 and drove east on this road looking for localities to kill time at before calling the woman at Sanborns to check about the plates. We checked the following localities

0.8 miles W. La Paloma (i.e., junct. Hwy 281 & Texas farm road 732), Cameron Co., Texas.

An ~~drainage~~ old irrigation ditch paralleling a newer ditch just next to it. Fields on either side but much weedy growth in the relatively shallow water & also good clumps of water hyacinths. Worked the ditch on both sides of Hwy 281

Thamnophis proximus : Sam got two and Sam a Third. Of the two snakes caught, the larger has a pale orange mid-dorsal stripe and an essentially brownish (not olive green) area below the light lateral stripe but above the tips of

the ventrals.

Natrix rhombifer : Sam saw one.

Cnemidophorus sp : Jim saw two.

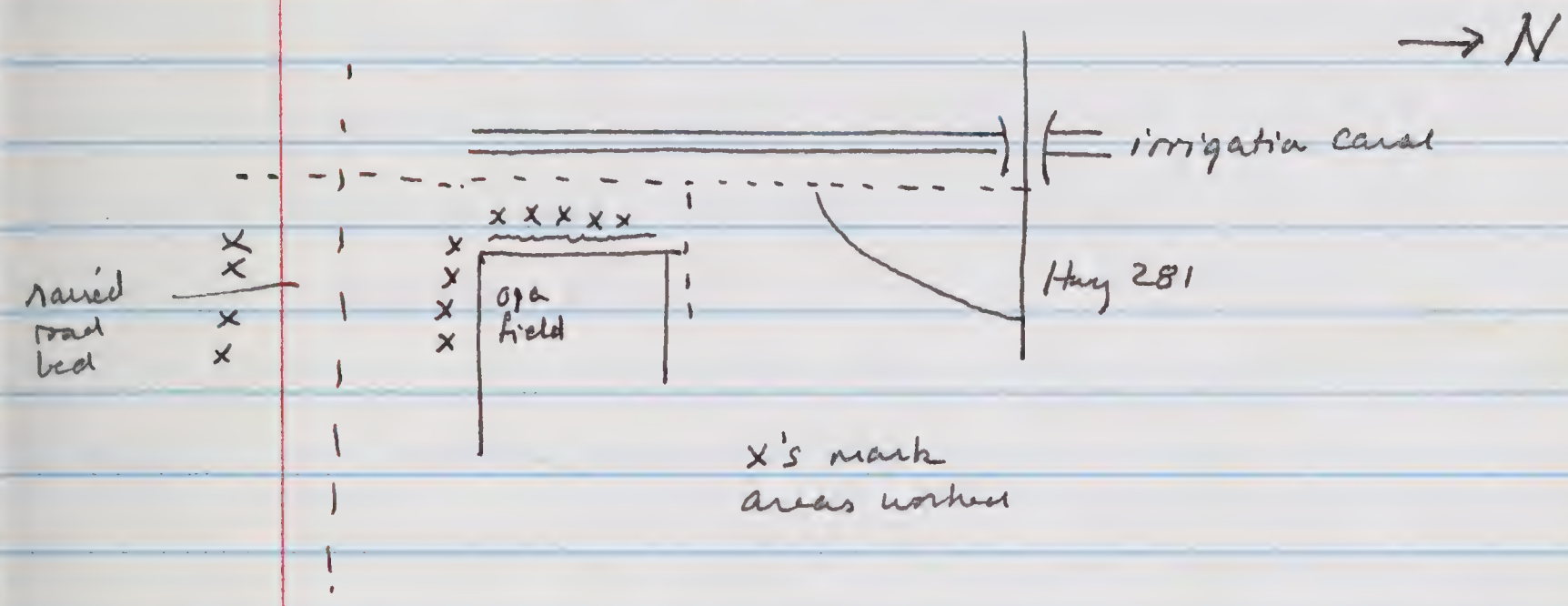
Chrysemys scripta : I found a dead ♂ at the edge of the water at the bottom of the canal. Orange markings on the carapace and black blotches centered in each scute of the plastron. Not saved.

Drove into the far west side of Brownsville to find a phone and call Sanborn's at around 1 PM. No plates according to Mr. McCormick. So headed back out Hwy 281. Took paved cutoff to Villa Nueva and worked a locality.

Vicinity Villa Nueva (0.6 mi. W. junct. Hwy 281 & Farm Road 802 on Hwy 281), Cameron Co., Tex.

Irrigation canal area again but this time we worked a small ditch below the canal & paralleling a fenced field – where there were several frogs – and a more or less open area between another an elevated patrol road & an acacia bordered open field. There were Cnemidophorus abundantly in the

open area. Also worked briefly the other (south) side of the raised road.



21-22 Cnemidophorus sexlineatus : Shot along the open area between the elevated road and the acacia bordered field. Sam and Jim got others in the same area

Sceloporus sp. Jim shot at one on the south side of the raised road in an area of thin acacia trees. Got away. Was seen on the ground & fled to a tree.

Pituophis melanoleucus : Sam got one out of a woodrat nest.

Rana sp. In the small drainage area to the west of the open field. Got a good look at one large individual: 2 had large dark dorsal spots & light(?) dorsolateral ridges.

Drove back into Brownsville to call Sanborn's again only to learn that the plates had not come in as yet. Then went shopping for some supplies & checked into a Motel 6 for the night to try to recoup some of last nights' losses.

30 April

Got up at the leisurely hour of 9:30 AM and went down for breakfast in the motel cafe. After breakfast drove into town for some shot at Whitman's. They had none but Sam bought a hat and Philip bought a pair of fatigues.

Called Sanborn's & discovered that the plates had arrived so we went by to pick them up and be on our way. The plates look suspiciously like the old MV2 plates, but anything will do Did a quick grocery shop & then crossed the border at Matamoros without a hitch.

Headed ~~East~~ South on Mex. Hwy 101 after a little difficulty getting out of Matamoros. Drove all the way to Ciudad Victoria on one tank of gas — just over 200 miles on one tank. Picked up Mex. Hwy 85 South & then turned off to Gomez Frias where we camped at the end of the main road — across from the home of Señor Timothy Alvarez — or at least that is the consensus of the group about what he said his name was.

Mr. Alvarez showed us the road to Rancho de Cielo & also drew us a map which is included here with additions by me.

Photos on the way:

(1.) Pictures of the Thorn Scrub 108 km N. of Cd. Victoria. Looking east.

(2.) Pictures of the Lowlands from the lava outflow just South of the Tropic of Cancer. Volcanic plug, part of lava flow & coastal plain. Sierra to my back. Looking east.

Walked part way down the Rancho del Cielo Rd. until it got dark & then returned for a light dinner out of cans, a couple of beers and then to bed around 11 PM. Sam saw & shot at a large brown lizard on our walk down the path but did not get him.

Impressions along the drive South.

Matamoros is a dump and the road South of there is bad. The vegetation is similar to that around Brownsville - this is largely scrubby green acacia. Further South there is dry grassy thorn forest on a fairly flat plain. This becomes slightly more rolling with a couple of areas of hills but then flattens out again before Cd. Victoria. The Sierra really jumps rises abruptly from the coastal plain at Cd. Victoria. South of Cd.

Victoria one drops off the a lava outflow of the Sierra and then winds through the coastal plain & its thorn forest before reaching Caleana Canyon. As Caleana Canyon one rises briefly through the canyon & into tropical deciduous forest.

The road to Gomez Frias rises rather steeply & the town lovely is situated on a narrow ridge paralleling the Sierra. It is a beautiful, lush town with friendly people

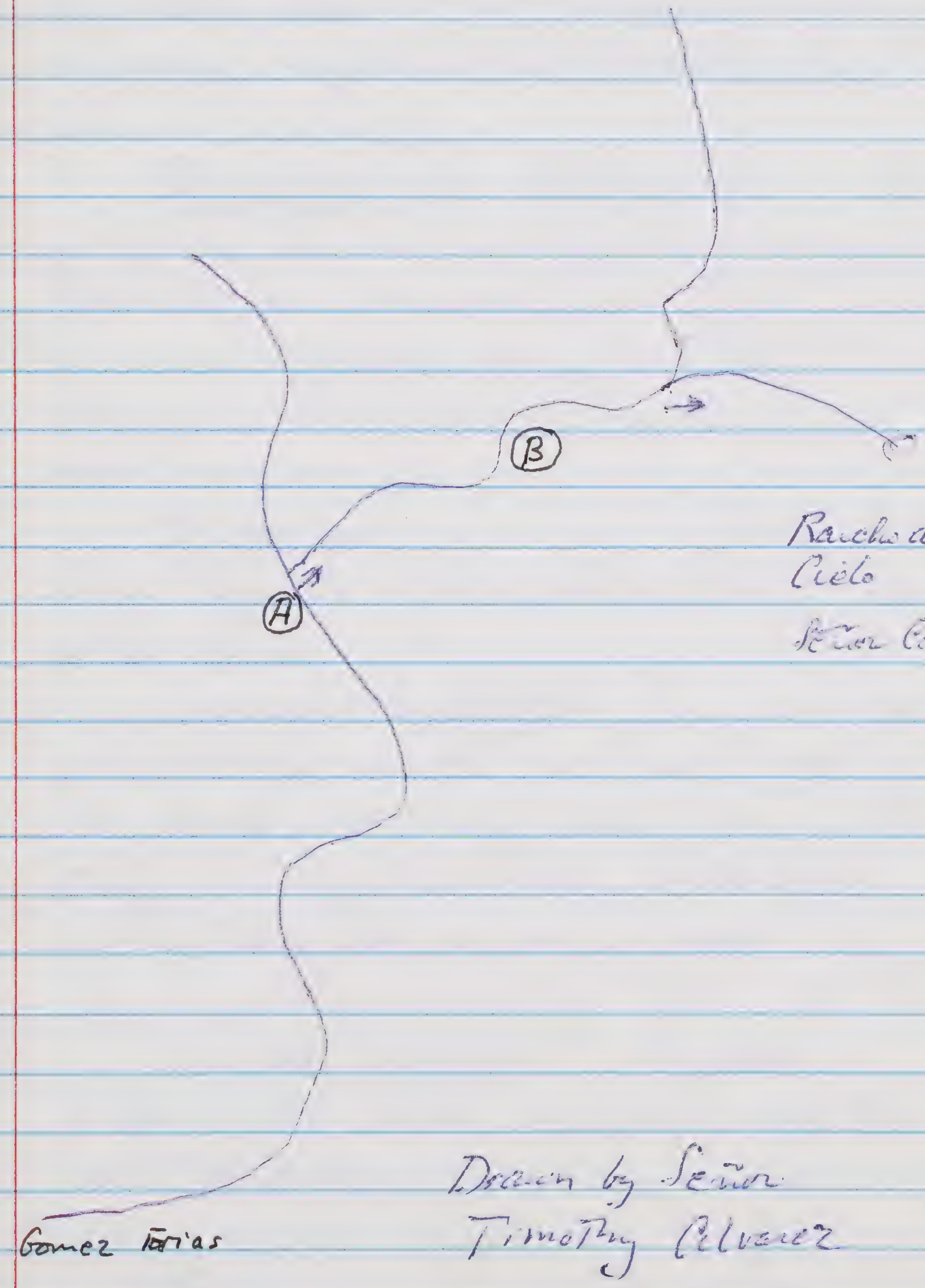
1 May

Arose about 7:00 AM with a feeling of anxiety about at least getting dressed before the bulk of the population were about their businesses — earlier, about 5:00 AM, some of the local young men met below our street light to await being picked up for work, and while they waited they sharpened their machetes causing us some mild anxiety.

Starting walking the road to Rancho del Cielo but got picked up by a truck going to a forest cutting on the way. On an interim walk along the way at the place marked by an (A) on the map, we saw a False Coral Snake in the path:
Sam bagged it.

We got off on the Rancho del Cielo road when one side turned off and the place

Map of Gomez Farias Area & Road to Rancho de Cielo



Drawn by Señor Timothy Alvarez

where I believe we got off is marked by a (B) on the map. Here there were tank bromeliads, oaks, raspberries, etc. ~~and~~ we looked into several bromeliads + then started back down the road. The following were collected along the way.

23-24 ✓

Chiropterotriton chondrostega Sam got five, Jim one and Philip and I each one, these last are catalogued here. These specimens were all taken from tank bromeliads. Sam got two specimens in one tank bromeliad.

Drymobius Saw one as we began the ascent from the valley into the Sierra Madre.

Sceloporus variabilis: Sam got three and one more when he went back to look for his machete in the valley between Sierra de los Mangos and the Sierra Madre. On the rocks + in the leaf litter along the side of the road.

Scincella silvicolum: Sam got one + 2 saw another in the leaf litter along the side of the road.

Anolis Sam got one in the valley between the Sierra de los Mangos + the Sierra Madre as it ran across the road.

♀ with no dewlap. or Throat color.

Anolis undulata Sam got one along the side of the road in the leaf litter in the valley between the Sierra de las Margos & the Sierra Madre.

Returned from the walk down absolutely exhausted and sat around recuperating until about 5 PM when we picked up camp & move to a quarried out area on the ~~west~~ east side of the Sierra de los Mangos on the Gomez Farias Road.

Got the following at this locality between approx. 5:30 PM and twilight.

25-26 Sceloporus variabilis ! Sam got one and I got two which bear these tags. I also "got" two others which got away. All the lizards I saw were either on rocks, trees or we are camped a bank fronting a patch of Thorn Scrub..

This locality is low deciduous tropical forest which has not come into leaf yet. There is great plant and bird diversity too — much more so as comparable latitudes on the west coast.

General observations: The Sierra here is largely Cretaceous limestone with many fossil invertebrates embedded in the rocks. There is no standing or running surface water anywhere nearby and the people of Gomez Farias use spring water.

There is no clear stratification of the vegetation in the Sierra. As there might be in western North America.

2 May

Got up around 7:30 AM to find the sky overcast with the smoke from the burning cane fields. This smoke was to envelop us for the rest of the day as we went down the east side of the Sierra & the coastal plain.

I worked around the campsite from 8:30 - 9:00 AM and saw several Sceloporus - presumably the same species as yesterday - but got none. Saw no other lizards.

We went further South into Ciudad Mante for gas & ice and then back to the Ocampo road which runs west off Mex. Hwy 85. Drove to the town to check out the river which is nearly nonexistant there & then back out

Stopped on the west face of the Sierra de l Abra near the crest along the road. They had removed a big lot of flagstone-type rocks from the area and there were many other such rocks scattered above. The soil is black + the whole face was hot. Saw Sceloporus variabilis (?) in the trees & on the ground & saw a couple of Crotaphytus sp. in the road cut at the crest.

Continued east to the Ocampo road (Mex. Hwy A70) where it crosses the Rio Comandante. Worked along the north side of the river collecting and observing the following:

27

Crotaphytus — Sam got six, Jim got one and I got one. They were in the brush along the road above the river & along the river. Very hot & very fast.

Holbrookia — I saw one along the river in fine gravel.

Ctenosaura — I saw two individuals - one large one in the washed out remains of a cement bridge and a smaller one in vegetation along the river. Both had well developed whorls of spines on the tail.

Sceloporus variabilis — In the brush & trees above the river. on the edge of the bank.

Continued on into Ciudad Mante and then South to Hwy 80 which we took west into the Sierra Madre to the crest of the mountains. The vegetation is dense tropical deciduous forest with no place to pull off & work hence we turned around at the crest & returned to Hwy 85 South. Took this to Ciudad Valles where we gased up and started into the Sierra again on Mex. Hwy 70.

Turned off on the road north to Rascon & Stopped to work a cleared, now second growth area on the South slope of a ridge. Saw nothing but one Sc. Cnemidophorus. The people along the road seemed unfriendly and since our plan was to take this road as part of a grand circle through Rio Verde and Jalpan and Xilitla to Cd. Valles, we decided to return to Cd. Valles for the night and begin again in the morning.

Stayed at the Hotel Valles trailer park for 26 pesos. Had a good hot shower & dinner and then Sam and Jim went out to collect the geckos on the hotel walls. These were Gehyra mutilata and they got a total of 9. Jim also got one Sonoriscea bauduini. The locality for these animals is Hotel Valles, Ciudad Valles, San Luis Potosi

Had a brief visit from some fairly drunk but polite youths who had hitchhiked down from San

Luis Potosi for the week-end and were our only companions in the trailer park part of the hotel - which was otherwise filled to capacity. Finally got to sleep around midnight.

3 May

Awoke about 7:30 AM to the sound of the street noise from the main hwy. that passes the front of the Hotel. Pickled all of the animals that we had hoped to photograph & had been carrying around.

Finally set out on the road to San Luis Potosi (Hwy. 70) that we had started out on yesterday. We stopped at 3 localities along the road as follows.

El Venadito, San Luis Potosi. An oak forest that had apparently had the ground cover burned off and then regrown. Locality below the crest of the Sierra.

28

Sceloporus variabilis: Sam and Jim collaborated on two specimens - both Jim tagged. I got one off the rocks of the road cut.

0.9mi. E Vincente Guerrero, San Luis Potosi. A oak bordered field covered by scruffy brush & acacia. north side of road. In the Sierra.

Sceloporus variabilis: Sam got one off a log along the fence and several others were seen on trees, rocks & the ground.

Other alternative designations for the Anolyctopsis locality below: 0.6 miles E. of km. 110 on Hwy. 70 and 9.0 miles E. of La Boquilla on Hwy. 70

15.3 miles E. Rio Verde via Hwy. 70, San Luis Potosi. 1:00-2:50 pm

A very arid area on the plateau west of the Sierra Madre. Worked a south flowing gully (dry) for Cnemidophorus and found 2 Anolyctopsis papillosus instead. Both specimens were under a white flowered bush (flowers, fruits & leaves collected) at the leaf litter - loose soil interface on the downhill side from the main trunk of the bush they were found under. The smaller specimen was found on the west side of the gully & the larger was found on the east side. The technique employed was exactly that used in hunting for ~~[illegible]~~a Anniella in California. - just raking away the leaf litter layer & then raking away the loose soil beneath.

The larger specimen defecated a blackish substance and bit me, and both specimens wriggled violently when held in the hand. The smaller specimen was pinkish in color ventrally & brownish above. The larger specimen lacked the pink ventral color.

Continued on into Rio Verde where we gassed up & bought Sodas and then took the road SE to Pedro Montoya, San Ciro & Jalpan. The area SE of Rio Verde is a very prosperous agricultural area.

Took some habitat shots 4.4 miles N.W. of the San Luis Potosi - Queretaro State line.

Came down through a spectacular barranca of a tributary of the Rio Santa Maria & took a photo of the Rio Santa Maria gorge from the bridge across the river (looking east)

Stopped on the road to Jalpan at a tributary of the Rio Santa Maria 0.4 miles W. of El Trapiche, Queretaro. The tributary is lined with many very large and spectacular cypresses

31-32 ✓

Rana — Sam got nine small specimens and I got another plus one tadpole. All from along one stretch of the creek by the road.

Jim saw a Sceloporus.

Passed through several small mountain ranges around Jalpan and one east of there. Caught Mex. Hwy 120 at Jalpan. Came up a steep canyon on Hwy 20 and over the crest

entered an oak forest with orange red soil. We camped in the forest just S.W. of El Lobo and just immediately west of the Tres Lagunas road. There are many rotting logs on the ground which look inviting, also Sam has a couple of sink holes in the area for salamanders. We will work the area tomorrow.

May

Woke up at 6:30 AM to lots of birds trading around the oak canopy. Ate some breakfast and wrote field notes before heading for a spot west of our camp site as follows

1.8 - 1.5 miles west of the Tres Lagunas cutoff along Mex. Hwy. 120. Area of oak and madrone on both sides of the highway. 9:45 - 11:30 AM

-36 ✓ Sceloporus torquatus This species is common on the rocks and fallen, rotten logs The lizards were easy to dig out of their retreats if those were in the fallen logs or small rocks. Many apparent hatchlings of which some of these are representative.

♂ Eumeces lynxe belli Sam got one out of a pine pole on the side of partly sunny - partly shady ravine. Color in life: brick reddish wash on infrabials, chin and throat.

37 ✓ ♂ Crotalus triseriatus aquilus I got this snake

from beneath a rotting stump out in the sun. was curled in a depression beneath the side of the stump. Ventral part of chin & lower labials with a faint pink wash

Continued east on Mex. Hwy 120 to the town of Ahuacatlan, ~~Guanajuato~~ San Luis Potosi. ~~San Luis Potosi~~. Jim and Sam went to the sink hole that supplies the town with water — This is just east of the town and Philip and I went to find the cave near the cathedral in the center of town.

Cave just east of Ahuakatlan, ~~S.L.P. Guanajuato~~ San Luis Potosi.

Jim and Sam went into this cave and got two Syrrhophus longipes.

Cave just SW of the church in Ahuacatlan, ~~San Luis Potosi~~ ~~Guanajuato~~, Mex. There were two parts to this sinkhole, one a horizontal, hall-like shaft going in about 30 yds from an opening about 10' below the surface. In this part we got several Syrrhophus longipes two of which are catalogued here & ~~8~~ many Chiropterotriton magnipes 13 of which are catalogued here. The frogs were found on horizontal ledges in the cave & the

38-39

40-53

Salamanders were on the vertical walls as well as the horizontal ledges. The salamanders appeared very pale in the cave but considerably darker when we were pickling them later.

The other part of the sink hole is a vertical shaft off a short horizontal antechamber. I collected a large Chiroptaro triton (#53) and a mass of eggs (54) on the vertical wall of the antechamber. The eggs were on a slightly sloping shelf off the vertical & were strung out in a string oval in shape: 8000 8000 8 The salamander near the eggs moved slowly toward a crack. She was first seen just a few mm. away from the eggs — not touching them.

Sam saw two more Chiropterotriton in the cylindrical vertical shaft off the antechamber of this second part of the cave.

Left Ahuacatlan and drove east on Hwy 120 through Xilitla and above a very large barranca to Mex. Hwy. 85. Took this hwy north to Ciudad Valles & checked in at the Hotel Valles. Had dinner in the restaurant and then pickled the days catch. Sam made a couple of forays through the Hotel for Gehyra mutilata and got several. The place is what you could easily call "infested." with these geckos. In bed about 1 AM.

5 May

Woke up about 8:50 Am and got off about 9:40 Am. Day began oppressively hot - perhaps the hottest and most humid we've had yet. Headed south of Cd. Valles on Mex. Hwy. 85 the plan being to go as far south as possible on this road in one day while checking the likely looking Ambystomids habitats on the way. As it was we checked several areas, only one of which had herps and we ended up in the highlands of Hidalgo at a good karst area to look for salamanders. The only good hunting we had along the road was as follows:

Grounds of the Hotel Cavadonga a few miles south of Ciudad Valles on Mex. Hwy 85
This is a large resort hotel well removed from the suburban sprawl of Cd. Valles. It has large extensive grounds including gardens, a large, now dry swimming pool, and a golf course. There is a stream running through the grounds on the east side and the gardens water a good deal. It was all the water and the lush vegetation that made the place an oasis in this otherwise dry area and that made it so attractive to us. We worked the grounds between 10:10 - 11:25 Am and found only the following:

Phrynohyas venulosa 2 found one

Sitting on an elephant ear bracked leaf partially covered by another leaf from another plant. The plant the frog was on was one of several bromeliads growing together in a clump just outside of the hotel grounds where the stream flowing through the ground enters the ground.

Color in life: Dark blotches on the dorsum & limbs are dark olive brown and the basic ground color is very light chocolate brown. Iris gold color with dark black streaks radiating outward from the pupil. Immaculate ventor. This description from the cold animal freshly taken from ice chest. When first caught the frog was more generally grayish in color.

Ctenosaura — caught in the dry swimming pool where she had fallen in and been trapped. We all ran him down and Jim caught him.

Thamnophis — Sam caught this one along the small stream course as it flowed through the golf course. There was 1 ft high grass along the immediate edge of the water but there was fairway immediately bordering this grass.

Tadpoles — Sam

Scooped out a bunch of tads from an even narrower part of the stream between the fairways.

Stumbled back to the hotel bar to down two 7-ups apiece and recover from the severe heat and humidity. Temp in shade according to thermometer in the bar: 34°C.

Continued south on Mex. Hwy 85 and tried several froggy looking areas - elephant ear clumps (but with no water beneath), streams, and creeks. Found nothing.

At Tamazunchale the road starts to go up into the Sierra again. We continued on the road into Hidalgo and stopped at a karst area near Puerto de la Zorra where I. Riddell told Sam there were sink holes with Chiropterotriton mosaueri. We found several sink holes but Sam deemed them to deep to enter so we will look for shallower ones tomorrow.

Camped in a grassy swale just a few hundred meters up the road from the cutoff to Puerto de la Zorra. Sky was overcast at dark & we heard a few

sprinkles until would [redacted] late it cleared off & got still. Had a good cool night's sleep except for the many trucks that seem to come out after dark on [redacted] nearly Mex. Hwy. 85. The Kearst area we are in is just a few miles north of Jacala via the hwy.

May Awoke at 6:30 AM to the sound of some passing farmer asking Jim for a drink of water and then a cervezza. Got up, had breakfast & wrote up field notes.

Went back down the road a few hundred meters to the Puerto Puerta de la Zorra area along Hwy 85 in Hidalgo. An area of oaks, a few pines and madrone. Does not appear to be as high as the El Lobo area just north of here on Hwy 120.

Sam went down two sinks holes but both were very dry and there were no salamanders to be seen.

We saw lots of Sceloporus but the only ones we actually got were two of Jim's. The males were blue headed in life with a large rusty mid dorsal blotch on the shoulder area. The Sceloporus were on the limestone rocks and the nearby trees as well.

Packed up and Started back down Hwy 85. Last nights' camp site was, therefore, the furthest South we penetrated on this trip.

Took a couple of photos of the cultivated mountain tops in the vicinity of Cuesta Colorado, Hidalgo which is just below Puerto de la Zorra.

Found a badly flatened DOR snake ( ) on Hwy 85 0.9 mile SW of the Hidalgo - San Luis Potosi line in Hidalgo; near Canal de la Gringa.

Cased up & coked up at Tamazunchale and then headed north again. Checked several sites along the road that looked like they might be good Anolytropsis habitat, i.e., shaded areas beneath trees with leaf litter - there were generally orange & mango groves.

At one site - El Laurel, San Luis Potosi Sam caught two Anolis while raking the leaf litter at the buttresses of large trees.

Continued north to Ciudad Valles & pulled in for the night at the Hotel Valles where Sam caught several more Gehyra mutilata.

The burning of the cane was very heavy this afternoon as we were going north from Tamanzunchale. Perhaps they are trying to get it all done before the rains come. At any rate the air is thick with smoke, there is a pall-like haze over ~~sky~~ everything & the sun hangs like a red disc in the western sky above the Sierra.

7 May

left Ciudad Valles about 10:10 AM after having got gas, water and ice. Drove north on Mex. Hwy. 85 in order to pick up Mex. Hwy 80 across the Sierra and then Mex Hwy 101 back across the Sierra to Cd. Victoria.

Stopped at several likely looking Anelytropsis habitats without success. Those stops at which we got other specimens are as follows.

21.2 miles S. Tamaulipas - San Luis Potosi State Line on Mex. Hwy 85 in San Luis Potosi

Thorn forest on either side of a creek bed with small isolated pools of water. Deep cracks in the ground from the severe dryness.

Sceloporus variabilis. Sam and Jim each got one and many more were seen

both on the ground and in trees.

Ameiva — Jim and I each saw one.

Cnemidophorus — Saw several

Phrynohyas venulosa : Saw got two - the larger specimen from an elephant ear leaf and the smaller specimen from the axil of an elephant ear bromeliad.

El Salto, San Luis Potosi - just north of Mex. Hwy 80 along the Rio Valles and near the base of the now dry falls. (The water has at least been partially diverted by the nearby power plant such that the falls are completely dry during the dry season).

Eleutherodactylus — Sam got one under a stone in a damp back water of the Rio Valles below the falls area.

Tadpoles — Saw and got several from a back water with water lilies. I got a larger one from a small stream flowing through a terraced garden directly below the falls area.

Continued west on Mex. Hwy 80 into the Sierra and spent the night at the forest fire tower at the crest of the road across the mts. Had brief showers early in the evening and a good deal of lightening — most rain we've had so far.

8 May. Up about 7th and set off to hunt the area after putting gear away. No breakfast this morning as its too humid, the dishes were left dirty from last night & there's not that much left to eat That's all that appertaining.

Fire tower 2.0 miles E. Agua Zarca on Mex. Hwy. 80, San Luis Potosi.

The hilly crest of the road over the Sierra. Mostly oaks. Many bromeliads, although the taxa bromeliads that we found a Gomez Farias are fewer in number here and lack water. The area looks like it could be rated as low grade cloud forest.

There is an auxillary house for the tower on the road at the base of the hill for the tower. The base of this hill behind the house has been cleared as have two broad paths up to the tower. These cleared areas have rock outcrops (limestone) and behind the "house", at least, downed oak trees.

We worked the open areas between the house at the base of the hill from 7:45-9:55 AM with the following result.

56-57 Sceloporus variabilis Sam got several and I got these two. My two were from the large downed oak trees.

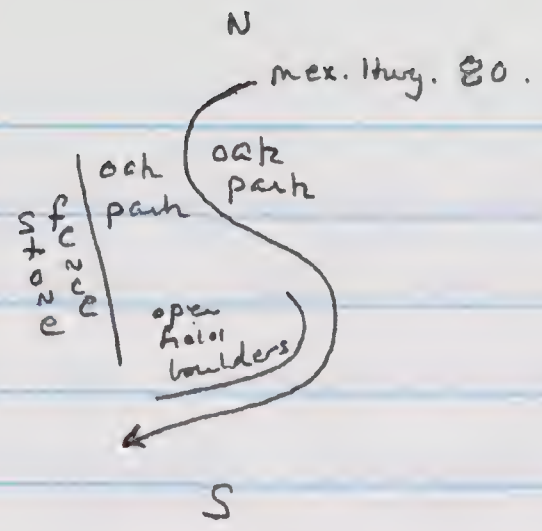
Sceloporus jarrovi Jim dug this large specimen out of a limestone crevice. Photo.

Masticophis Saw a large unicolored specimen dash across the west trail up to the tower. Not caught.

Continued west on Mex. Hwy. 80 to our second locality for the day which was 6.7 miles E. Ciudad del Maiz, San Luis Potosi via Mex. Hwy. 80.

The upper part of the area worked was park-like oak forest on the west facing slope through which the hwy. ran. The lower part of the area was an open acacia field & pasture with boulders bordering it on one side as a fence and on the other side (south side) as a fringe along the hwy. There were boulders, mainly lava, throughout the entire area. & red

Soil everywhere.



58 – 62 Sceloporus spinosus found commonly on the boulders and in the oak trees in the lower, more open area but also above.

Color of a ♂ in life: Lateral part of venter pale green; throat turquoise blue. Photo of dorsal & ventral views of chilled animal.

Sceloporus scalaris a smaller species found generally on the ground in the lower area. Sam got two.

Sceloporus jarrovi found on rocks in the upper area, often out in the open. Sam got several, not seen by me on the east side of the road in the upper area & all of Sam's were collected on the down side (west) part of the upper area.

63 – 64 Sceloporus variabilis found by me only in the upper area on rocks & trees.

The four species of Sceloporus at this locality appeared to divide up the habitat in the area as follows.

Sceloporus spinosus and Sceloporus jarrovi are the two largest species and S. variabilis and S. scalaris are smaller. Sceloporus spinosus appeared to be the most abundant, and it was also both the most widespread and the most ecologically diverse, i.e., it occurred throughout the locality and on both trees & rocks. Sceloporus jarrovi occurred only on rocks in the upper part of the locality. Sceloporus variabilis occurred on both rocks & trees in the upper part of the locality. Sceloporus scalaris was the least common and was found only on the ground & rocks in the lower, more open part of the locality.

Color notes for a ♂ S. in life:

Throat and sides of venter purplish pink bordered ant., medially & posteriorly by blue but the blue borders on either side not meeting medially. Two golden yellow spots on body at base of ~~fore arm~~. anterior leg: one dorsal to the insertion & the other ventral. Undersides of rear legs & vent area bright yellow.

65 Cnemidophorus Sam got two and I got one here catalogued. Mine was running along the stone fence in the lower part of the locality. Photos of mouth, top and venter.

6 Scincella silvicola Philyp got This one under a fallen rotting oak tree in the upper part of the locality. Another "flash of a tail" was seen in the bark & litter exactly where we caught this one so it could have been a second specimen.

Color in life: Belly pale yellowish green. Photo of dorsolateral view.

Laid two oblong eggs back in the lab at Berkeley. These are preserved along with the specimen.

Continued west on Hwy 80 Through Ciudad del Maiz where we got cheated by a faulty meter at the Pemex Station. Stopped in an accacia lucia ravine 8.0 miles west of Cd. del Maiz to look for Aneylotropsis. Saw only Cnemidophorus. Took photos of the habitat.

Later started getting into a more desert-like habitat in the flats of the plateau and stopped along the side of the road (Mex. Hwy 80) several times on foot to look under yucca logs.

0.4 miles E. La Morena San Luis Potosi via Hwy. 80. A desert-like area with much thorn scrub on the south side of the road and cultivated - or at least plowed - land on the north side. Worked the rotting yucca trees on the right of way on the north side of the road.

67 Sceloporus cautus from under a fallen, rotting yucca log. Another was seen but escaped. When chilled has virtually no chromatic color any place of head or body.

Cnemidophorus Several seen

but more caught. A new species for us — has a blush wash on the back.

68 Hypsiglena Philyp found this one under a fallen, rotting yucca log.

There were many invertebrates under the yucca logs: millipedes, centipedes, scorpions, tenebrionid beetles, etc. Also the ground was soft — almost ash-like. We thought all of these factors might make for good Ameiva tropisi hunting but we didn't find it.

4.3 miles w. San Rafael, San Luis Potosi via Mex. Hwy. 80. A slightly more diverse area than the last spot but essentially the same kind of habitat.

Sceloporus cautus Jim got one from under a yucca log. Color in life: Lateral belly patches bluish green medially fading to yellowish green laterally; belly patches bordered medially by black — this black not meeting medially. Throat dark but with ~~two~~ a distinct ~~later~~ green spot on each side of the post. part of the Throat. No other chromatic color.

Hypsiglena San got one from out of the base of a dead yucca; in the roots.

San Luis Potosi

Junction of Mex. Hwys. 101 + 80 / South side of Hwy 80. Into The last place essentially.

Sceloporus Sam got one inside a cactus.

Cnemidophorus Sam got Three and Tim got one. There were many around but all very shot and fast.

69

Hypsiglena

Masticophis Under base of rotting yuccas. Sam got one small specimen. Color in life: ~~Olive green fading to~~ Dorsum olive green anteriorly changing to brown posteriorly, tips of tail reddish brown. Venter light yellow anteriorly fading to light olive green at midbody and reddish brown on the underside of the tail. Labials same yellowish color as ventral part of Throat. A thin light lateral line anteriorly fading posteriorly.

Masticophis flagellum I routed a large yellowish specimen out of a rotten yucca, but it got away down a rodent hole at the base of a large Agavaceae.

Continued on into Col. Victoria arriving after dark and Stayed at Las Fuentes Motel. Went into La Posta restaurant for dinner. Pretty good.

The pass over the Sierra just west of Col.

Victoria is spectacular. and also a bit ~~isnt~~ intimidating at night too.

9 May — Got away from Cd. Victoria and drove north on Mex. Hwy 85 to Linares where we had lunch at a motel on the north side of town. Took Mex. Hwy. 60 west to Galeana. Made a false start north out of Galeana to search out a Chiropterotriton type locality, only to realize along the road that we couldn't get there that way. Came back to ~~Galeana~~ Galeana and continued west on Mex. Hwy 80 to Mex. Hwy. 68 which we took South to the town of Pablillo — The alleged type locality of Pseudoeurycea galeanae. Not being unprepared with the area (too dry) we continued South about miles. and noticed an west facing draw and hillside as follows.

3.3 miles South Pablillo, Nuevo Leon on Mex. Hwy 68. West facing hillside, a gully flowing west (but no water) and the flats of a north flowing stream bed below. Most of the upper reaches of the hillside were cut over and there was quite secondary brushy growth but further north, down the slope toward the gully, there were both oak & pine. The flats along the stream bed are relatively open with scattered oak & pine. Also, strangely, some cholla which was in bloom and

reddish flowers.

Sceloporus jarrovi minor Jim & Sam got many of these animals off the soft gypsum walls of the upper reaches of the gully (photos). They would duck into the numerous crevices upon approach but the crevices could be flaked open easily due to the crumbly nature of the rock.

Color in life of ♂♂: Head dark blue; color black; body yellow-green; tail and legs dark blue (but not as dark as head). Lateral parts of belly and throat dark blue — lateral parts of belly bordered medially by black. Black spot on side just anterior to insertion of rear leg.

Color in life of ♀♀: Drab brown overall on dorsum; posterior light border of collar faint coppery gold in some specimens.

70-71 Sceloporus parvus Found under logs on the cleared upper slope. Hand caught in the debris under the logs.

Color in life (#70): lower sides anteriorly pinkish; lateral part of venter light green but midventral area light; throat yellow as is undersides of thighs and preanal area.

Color in life (#71): only slightly rusty wash on labials.

72 Crotalus Found under a rotting dried log on the cleared ~~part~~ part of the hillside.

We camped in the open area below the road and above the streambed and were entertained by a series of electrical storms passing from west to east to the north of our camp. We had no rain at camp.

10 May Arose at 6:00 Am to get an early start for the border. Went back north to catch Mex. Hwy 60 west and then at San Roberto Mex. Hwy 57 north all the way to Piedras Niegras and Eagle Pass where we crossed the border about 4:00 Pm Texas time.

Found a DOR Rhinocheilus lecontei on Mex. Hwy. 57 at a distance of 0.8 miles S. cutoff to Acatita, Coahuila, Mex.

Took U.S. Hwy 277 west out off Eagle Pass to Del Rio where we had dinner and began night driving U.S. Hwy 90 west. We got into thunderstorms and started picking up the following:

Phrynosoma cornutum actually picked up just outside of ~~Del Rio~~ Eagle Pass at the junction of Texas Farm Hwy 1588 and U.S. Hwy 277, ~~Val Verde~~ Maverick Co, Texas before dark & the rains. West side of Del Rio (J. Hankin #125)

The following were found night driving

in the rain.

J.H 4.4 miles E.
of Dryden (via U.S. Hwy. 90), Terrell Co., Texas.

JH 5.3 miles W.
of Dryden (via U.S. Hwy 90), Terrell Co., Texas.

SSS Scaphiopus 5.8 miles W.
of Dryden (via U.S. Hwy. 90), Terrell Co., Texas

81 Scaphiopus 5.9 miles W.
of Dryden (via U.S. Hwy. 90), Terrell Co., Texas.

82 Bufo 5.9 miles W.
of Dryden (via U.S. Hwy. 90), Terrell Co., Texas.

J.H Scaphiopus 6.0 miles W.
of Dryden (via U.S. Hwy 90), Terrell Co., Texas

6.1 miles W.
S.S. of Dryden (via U.S. Hwy. 90), Terrell Co., Texas.

73-80 Scaphiopus 6.5-7.5 miles W.
of Dryden (via U.S. Hwy 90), Terrell Co., Texas.

J.H. 7.5-8.5 miles W.
of Dryden (via U.S. Hwy 90), Terrell Co., Texas.

S.S. Scaphiopus 8.5-9.5 miles
W. of Dryden (via U.S. Hwy 90), Terrell Co., Texas

Thamnophis marcianus DOR 18.3 miles
(via U.S. Hwy 90) E. of junction Hwys 90 & 385 in Marathon, Brewster Co., Texas.

Bufo 6.8 miles (via U.S. Hwy 90) E. of the junction of Hwys 90 & 385 in Marathon, Brewster Co, Texas.

Stopped for the night w Alpine about midnight. Sky still overcast & threatening so we stayed in rather than camp out.

11 May — Arose at 7:00 AM and had breakfast. Started west on U.S. Hwy 80 again about 8:00 AM Ran into ground fog for a while, but it cleared later. Picked up Insterstate 10 at Van Horn, Texas. which we took west. Lunch in Las Cruces, New Mex. Stayed on Interstate 10 until Casa Grande, Ariz. where we picked up Interstate 8. Took this to Gila Bend where we got off to night drive the back paved roads between I 8 & I 10 to the north.

~~Rhog~~

83 — Sceloporus magister — Got this Specimen crossing the road on the Southwest side of Casa Grande, Pinal Co., Ariz. late in the afternoon after dinner. Sam also got a little specimen. We also saw some Cnemidophorus.

The following were collected by night driving the area north of Gila Bend and Interstate 8 and South of Interstate 10

Pituophis melanoleucus — 7.8 miles N. Gila Bend (junct. old U.S. Hwy 80 and new U.S. Hwy 80) via old U.S. Hwy 80, Maricopa Co., Ariz.

Bufo — 9.8 miles N. Gila Bend via old U.S. Hwy 80.

Crotalus scutulatus 13.5 miles N.
Gila Bend via old U.S. Hwy 80, Maricopa Co, Ariz.

Bufo 13.6 miles N.
Gila Bend via old U.S. Hwy 80.

Leptotyphlops humilis 14.0 miles N
Gila Bend via old U.S. Hwy 80.

Bufo 15.6 miles N
Gila Bend via old U.S. Hwy 80

Coleonyx variegatus 15.6 miles N
Gila Bend via old U.S. Hwy. 80.

Bufo 15.7 miles N.
Gila Bend via old U.S. Hwy. 80.

Arizona elegans 22.1 miles N. Gila
Bend via old U.S. Hwy. 80.

Coleonyx variegatus 29.4 miles N. Gila
Bend via old U.S. Hwy. 80.

Lampropeltis getulus Approx. 2.0 miles
S. Tonopah, Maricopa Co., Arizona.

Crotalus cerastes Approx. 4 miles (airline) S.W. Tonopah, Maricopa Co., Ariz.

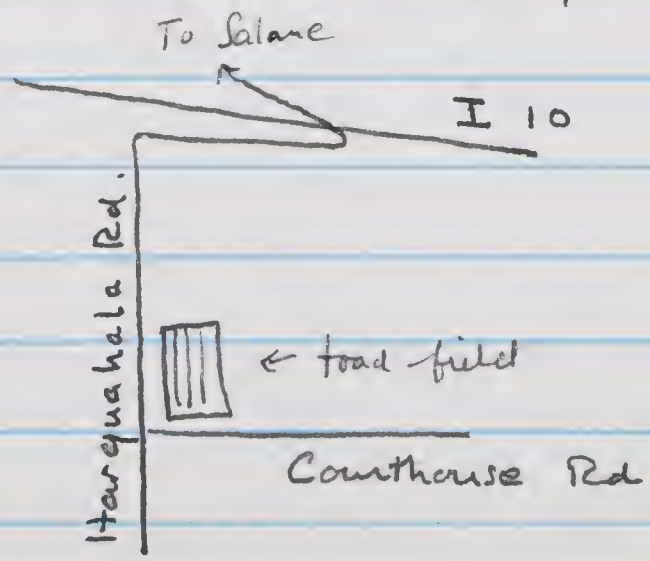
Phrynosoma Along Courthouse Road, 7-16 miles W. Tonopah, Maricopa Co., Ariz.

Crotalus scutulatus Along Courthouse Rd., 7-16 miles W. Tonopah, Maricopa Co., Ariz.

Crotalus scutulatus Along Courthouse Rd., 7-16 miles W. Tonopah.

Bufo cognatus Along Courthouse Rd., 7-16 miles W. Tonopah.

84-88 Bufo cognatus - just N. of the intersection of Harquahala Rd. and Courthouse Rd., approx. 16 miles W. Tonopah, Maricopa Co., Ariz. The toads were calling in a flooded (irrigation) rice or wheat field. Only one amplexing pair found although others amplexed later back at Berkeley in the cold room.



Took I 10 west to the last Ariz. rest stop before the Calif. line and spent the night here. Lights of Blythe across the Colorado River just to the west

12 May

Arose early and went into Blythe for breakfast before pushing on to Berkeley. Had a long day in the car that was boring as hell. Saw a V.W. roll as it was coming down Tehachapi Pass. We tried to help & fortunately the guy - who was drunk as a skunk - was not hurt too badly.

Arrived back in Berkeley to beautiful weather at about 7:30 PM.

Greer, A
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Mexico

24 May 1975

DEL PUERTO CANYON, STANISLAUS CO., CALIF.

24 MAY ; JOHN RUBEN & ALLEN GREER

John and I went out to Del Puerto Canyon in order to catch some live Crotalus for his thesis work. We planned to work various localities during the late afternoon and then might drive the paved (lower) part of the road.

We worked two localities during the late afternoon but got or even saw very little. Only at the following (second) site did we have any luck.

90

Crevmicloophorus — Shot along the road above the stream.

Sceloporus — several seen on the trees and rocks.

Thamnophis — a large gravid female in the grass along the side of the stream.

Rana catesbeiana — heard calling along the stream.

Got the following night driving.

89

Pituophis melanoleucus catenifer — 1.0 miles W. of I-5 on the Del Puerto Canyon Rd. DOR in the late afternoon. In the grassy area ~~to~~ east of the hills. Saw several others this night.

Crotalus viridis - got two off the paved section. ~~no locality data~~ The smaller individual was found above 2 mi.

24 May 1975

E of where the gravel section of the road begins on 16 miles W. of I-5 along the Del Puerto Canyon Rd. The danger individual was taken 4.0 miles W. of I-5 along the Del Puerto Canyon Rd.

Took the Del Puerto Canyon Rd. to the Mines Rd. + this North to Livermore. Saw the following DOR on the Mines Rd. above Livermore: 2 Pituophis melanoleucus + 3 Crotalus viridis

Also saw lots of Bufo along both roads as soon as it was dark.

Addendum: Saw many Sceloporus on edge of road after road was cast in shadow very late in the afternoon. Appeared as if the lizards were absorbing the road's heat.

8 May 1975

DEL PUERTO CANYON RD., STANISLAUS CO., CALIF

28 MAY 1975

JOHN RUBEN & ALLEN GREER

Returned to the paved part of the Del Puerto Canyon Rd. for more Crotalus for John. Decided to just might drive it. Day was blazing hot — near record and we did well. as follows

Pituophis melanoleucus catenifer — 12 seen alive on road.

Crotalus viridis - 3 seen on road. Two collected - a large one & a small one; a second small one returned.

Clemmys marmorata - AOR just across from the Frank Raines Park.

91- 93 These numbers were skipped. They are not associated

-8 July

NORTHWESTERN MEXICO

The purpose of this trip is threefold: (1.) to collect a specific locality in southeast Sonora for a Cnemidophorus for John Wright; (2.) to collect another locality in southeast Sonora for mammals for Jim Patton, and (3.) to collect generally in southeast Sonora and northeast Sonora. This last was my particular interest in going.

The people in the group were: Jim and Carol Patton, John Wright and Philyp and myself. We took Jim Patton's car and planned to be gone approximately three weeks. The trip is being paid for completely out of personal funds.

7 July — Left Berkeley about 11:10 AM and took I-5 South to Los Angeles. Arrived at John Wrights' house about 7:10 PM. Went out to a Mexican restaurant for dinner and then returned to John's house to spend the night (in his back yard).

8 July — Left John's house for Tucson at about 9:00 AM and took I-10 East. Arrived in Tucson about and went straight to the University of Arizona to find Mike Rabinsa. Found Chuck Lowe

7 July

instead and he sent us down to the Flamingo Hotel for a nights lodging courtesy of the U. of A. Went down to the motel for a shower and dinner at a great steak house near the motel. Went back to the Univ. of Arizona for a bull session with Lowe & Robinson. This lasted until midnight.

9 July

Got away from the motel about 8:30 AM went by to pick up Mike Robinson for breakfast. After breakfast went around Tucson and for last minute shopping. Headed South about 1:00 PM for the border at Nogales.

Crossed without incident and took Mex. Hwy. 15 South to the north side of Hermosillo where we picked up Mex. Hwy. 21 east to Moctezuma

It got dark along this road while we were driving and we began picking up the herps we happened to see.

The first thing was a Coleonyx variegatus which I saw run across the road in an area of rock outcroppings. Didn't get the specimen, but there can be little doubt that it was a Coleonyx.

The following were collected

7 July

94 Masticophis flagellum DOR 6.5 miles W. Mazocahui

95 Bufo alvarius - AOR 1.7 miles W. Mazocahui

96 Bufo alvarius - AOR 1.0 miles E. Mazocahui

97 Rhinocheilus lecontei - DOR 6.1 miles E. Mazocahui

Pulled into a fenced and gated area on the south side of the road 14.6 miles E. Mazocahui. We couldn't see much we when pulled in but we would the following day.

Everybody else went to bed but John Wright and I tracked down some frogs calling on the north side of the road. They were calling by the side of a cattle tank formed by damming the headwaters of a gully. We found the following calling:

98-99 Pternohyla fodiens: five caught of which three two were saved. The others were taken for frozen tissue by John. The alcoholic remains were saved by John and will be deposited in L.A.C.M.

9-10 July

Each of these frogs were separated from the others and were calling from above the edge of the water.

Rana (pipiens group) One found in the water about 1 ft. from shore. Taken by John for frozen tissue & remains to be deposited in L.A.C.M.

Gastrophryne two or three individuals heard calling separately from around the tank. Call is a simple high-pitched "baa" or trill.

Got back from hunting about 11:00 Pm and bagged.

1 July Awoke at 6:30 Am - just at sunrise over the mountains - to a loud chorus of birds. Stayed here until 11:00 Am

The site 14.6 miles E. of Mazocahui proved to be an elevated, rolling area consisting primarily of thorn trees and rolling close cropped pasture. There was a stream bed ~~void~~ winding east through the area (the one we followed up to the frog pond last night) but no water either standing or flowing.

The following herps were seen &

0 July

collected.

Sceloporus clarki Several
Seen on logs and in trees. Appeared to be out directly after sunrise. None were collected.

00-101 Urosaurus ornatus Many were on logs or on small thorn trees. Very easy to approach and very ready to "stand their ground" and do push ups at the collector.

100 SVL = 51 mm; TL = 81 mm.

101 SVL = 50 mm; TL = 73 mm

♂♂ with medially confluent blue belly patches and a similarly colored color on the throat and chin. These blues can be dark blue or metalic bluish green: The sides of the tail & dorsum can also be tourquoise blue or all dark black.

02-103 ✓ Holbrookia elegans two collected along the vegetated banks of the stream bed. Gravelly beds with small willow-like vegetation & short grass.

102 SVL = 60 mm; TL = 61 mm.

Posterior medial part of throat orange as are spots just post. to axilla. Posterior to the orange post

10 July

axillary areas Re sides are yellowish. Orange of post. axillary patch extends forward over shoulder and onto sides of neck.

34 Eumeces obsoletus juvenile shot out from under a large dead log surrounded by a lot of woody litter. — essentially a stick pile. Pair of shook had just sidled out from under a piece of bark under the down log to Sum.

Generally black overall except for a deep dark blue on the tail which begins abruptly about 1/5 - 1/6 of the way post. from the vent. Light spots on supra ocular area faint w/ pinkish tint; light spots on labials white.

SVL = 40 mm; TL = 51 mm.

35 Callisaurus draconoides shot along a flat, open, sandy stretch of the stream bed. Another two seen but not collected.

Orange on posterior part of throat and on an area on each side of the chest anterolaterally. Faint yellowish wash posterior to orange chest spot and on sides. SVL = 69 mm.

July

106 ✓ Thamnophis ~~eq~~ cyrtopsis - caught along dry stream bed during morning.

Left the locality about 11:00 Am and drove into Moctezuma where we had lunch at the hotel on the north side of the plaza.

After lunch drove out to Mrs. Campbell's ranch 2 miles N.E. Moctezuma. Chatted with Mrs. Campbell and then went out to collect on her property.

The Campbell ranch is ~~on the~~ in a low flat valley covered with thorn scrub where it is not cultivated. The fields and are bordered by & the stream beds are lined with large thorn trees, ~~and~~ willows & cottonwoods. We hunted along these trees during the mid afternoon approximately from 2:00 - 3:30 PM.

We saw and got the following.

107 - 110 Sceloporus clarki - mainly on the larger trees. Not seen on the ground at all.

111 - 115 Urosaurus ornatus - on the trees - generally the smaller trees. Very "tame." We

July

caught many by hand. Never saw more than two animals – ♂♂ ♀ – per tree.

116 Cnemidophorus tigris – along the edge of the tree-lined stream and open fields and within tree-covered stream course. Several were seen

117 Masticophis flagellum – found about 2½-3 meters up in a tree. Very widespread punctate suffusion on the venter and somewhat on the dorsum.

118 Callisaurus draconoides – out of Mrs. Campbell's driveway. Open, hard flats.

Left Mrs. Campbell's about 4:00 pm. Went back into Moctezuma for a soft drink and then south of town into the lava field where we set up camp in circle to trap Perognathus for ~~J~~ Jim

Went to bed with lightning both to the north & south of us but clear overhead.

Jim saw a Salvadora when he was setting traps at sundown. This locality is 3.3 miles South of Moctezuma (by rd.) Sonora, Mexico.

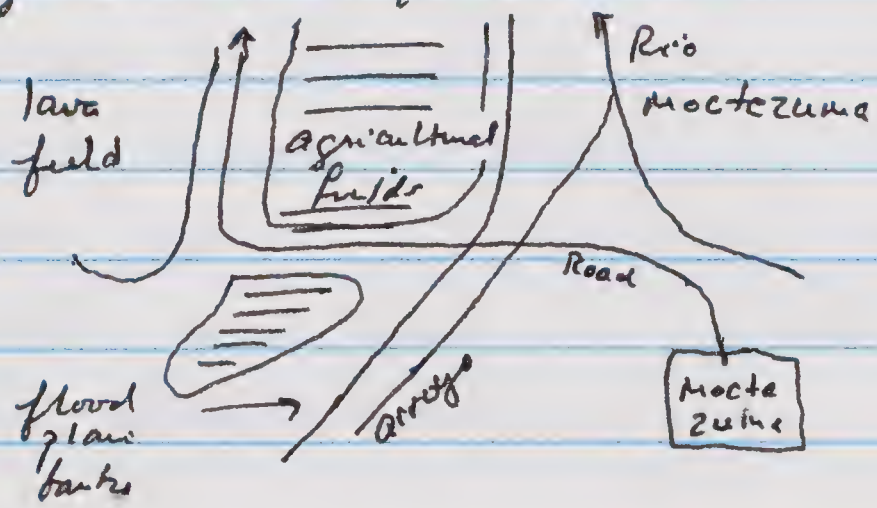
July Got up at sunrise and ran the mammal traps. Had about 10% success.

July

119 2 got a ♂ Holbrookia elegans on the lava plateau as the others were loading the car.

Drove back down to the South side of Moctezuma. The locality was 1.0 miles South of Moctezuma where an arroyo meets the Rio Moctezuma. Stayed here for the morning.

This is an agricultural area with alfalfa fields, ebo at the base of the lava flow. Between the agricultural fields and the rio & arroyo there is a flood plain covered with short willowy vegetation. We worked the trees bordering the agricultural fields and the flood plain ~~east~~ west of the agricultural fields.



~~Each~~ We captured or saw the following.

120-121 Bufo mazatlancusis - one from the alfalfa field and another from under a rotting hay pile at the base of the lava flow & to the ~~west~~ east side of the fields.

Scaphiopus sp. - John Wright

July

found one juvenile w a gopher hole.

122 Rana pipiens group - one from a water pool below the fields

123-126 Sceloporus clarki - all from off the trees between the fields.

Callisaurus draconoides - several seen on the upper edge of the flood plain which is sandy.

Urosaurus ornatus - almost all from small Thorn trees or fence posts but a few were seen or caught off lava rocks at the base of the flow.

135 ♀ Holbrookia elegans - one from the edge of a pasteur. Post nuptial coloration. See back for description.

136 ♂ Phrynosoma solare - John Wright caught one at the edge of the agricultural field next to the flood plain. When grasped by the neck bends the head back and brings the occipital spines into contact with ~~you~~ the fingers. No chromatic colaation at all.

137 Cnemidophorus sonorae - many seen & caught, but all but one taken by John Wright. The single specimen here died and was fairly "gone" when preserved. Found both at the upper edge of the flood plain & around the edge of the fields.

#135 Holbrookia elegans ♀ - Orange on post. axillary area extending forward along sides of neck and around infralabials — onto chest as well. A distinct orange patch on posterior gular area. Precloacal area on sides yellowish.

July
July

Chemidophorus tigris — one caught at the upper edge of the flood plain. Taken by John Wright for tissue culture.

138

Thamnophis cyrtopsis — one small specimen from the upper edge of the flood plain.

Masticophis bilineatus — one seen, not collected.

Went back into Moctezuma for lunch at the hotel. After lunch took the road east to Huasabas and Granados where we crossed the Rio Bavispe and continued east on the road to Nacozari Chico. Got caught in a big ~~dust~~ rain storm as we reached the crest of the mountains east of the Rio Bavispe. Rained off and on through the rest of the evening.

Stopped at El Coyote for dinner and then took the road to Huachinera about 0.4 miles N.E. El Coyote (by road), Son. It rained continuously as we put up camp & until about 2:30 PM when it cleared.

12 July

Woke up shortly after sunrise to get the first look at the campsite we had chosen in the dark last night. It consisted of a fairly wide stream bed running between

July

fairly steep rolling hills covered with Opuntia & Thorn trees. The thorn trees extend down into the stream bed. There is grass on the flats both in & above the stream.

The morning was sunny with a few clouds building. Worked the Stream bed and the base of the surrounding hills. The following were seen or caught at this locality during the morning.

139 Bufo punctatus — one small specimen from under Jim Pattan's tent on a cleared flat above the river bed.

Rana (pipiens group) — one nearly completely metamorphosed individual from a tributary of the stream bed which drained into the main stream bed. There were many large tadpoles in the pools of this tributary but this was the only nearly metamorphosed & fully metamorphosed frog seen. Taken by John Wright for frozen tissues & voucher specimen.

140 Kinosternon sonoriense - one small individual found by John Wright in a small pool of the tributary feeding the larger but dry stream bed. John saw two other larger specimens in a larger pool of this same tributary.

July

Sceloporus clarki – John & Jim Saw several individuals but none were collected.

141 Urosaurus ornatus – a few seen on the rocks at the base of the hills; the one collected was on the ground along the stream flats & jumped into a accacia tree where it was collected.

Holbrookia elegans – a couple seen; one along the flats along the stream bed and another at the base of the hills.

142 Eumeces obsoletus – from under a rock on the south side of the stream bed flats just below the rise of the hills. Very cold & lethargic as the stone was in deep shade.

143 Salvadora one from under a rock in talus on the hills on the north side of the stream bed.

144 Masticophis bilineatus – one chased into rocks on one of the "islands" in the stream-bed

July

145 - 149 ✓ Thamnophis cyrtopsis all from the tributary with water that fed the larger stream bed. Others seen that were not collected.

150 - 152 Crotalus sonorae : one collected by Phlyp & the other two by John.

West beg back into El Coyote for lunch and then took the road east to Nacori Chico. At a point 1.9 miles North of Bacadehuachi got two

153 - 154 Crotaphytus collaris (♂ & ♀). Both were on boulders on the west side of the road. Partly overcast. See back for color notes.

Continued on the Naco de Chico road to a point 13.9 miles S.E. Bacadehuachi (by road) where we had to stop because of high water in the first big arroyo on the road after coming down out the mountains east of Bacadehuachi. This point is also approximately 4.1 miles N.W. of Nacori Chico, Sonora.

This locality is the upper west side of a large valley that drains south into the Rio Yaqui. The vegetation is rather dense thorn scrub with a good deal of Opuntia. John & Jim say that the vegetation has a decidedly Southern aspect which I can see in the great lushness & density of the vegetation.

We arrived between Thunder Showers &

Crotaphytus collaris ♂ #153 - Throat, sides of neck & sides of body grayish torquoise green. This color also extends to posterior ventral sides of Thighs & ventrolateral sides of tail. Fore-arms similarly colored.

Upper eyelids & dorsal part of front feet yellowish.

Crotaphytus collaris ♀ #154 Tops of fore feet yellow. Crossbands of orange (?) from neck Throughout length of body.

Photos of both These animals.

12 July

decided we would have to spend the night before the water in the arroyo would go down enough to cross. We therefore spent the rest of the afternoon collecting herps and mammals. with camp perched on the west side of the arroyo along the road. We worked the area both north & south of the road along the west side of the arroyo. The following herps were seen or collected during the afternoon and evening. It was not raining during the afternoon but it rained torrentially after dark.

155 - 163 Bufo punctatus: Several ~~dug out~~ uncovered by pulling rocks out of the ground during the afternoon & others found hopping around on the ground after dark. Several came into camp during the evening to feed on the termites around the lights. Ground color olive brown with distinct red "warts". Bottoms of hands & feet bright yellow-brown.

164 Bufo alvarius: Several seen after dark both near the lights and ~~[illegible]~~ away from the camp. Most young but one adult seen.

165 - 166 Bufo mazatlanensis: ~~one~~ two after dark away from camp.

167 - 169 Pternohyla fodiens: - seen & caught both near the lights near camp & by the edge of a gully running with water. One calling from near the gully.

170 Holbrookia elegans: one caught by John & Jim as it was forced out by the rising water in the ~~stream~~ flood plain of the river in the arroyo.

2 July

171 Sceloporus clarki ♀ John + Philyp chased one down after it was turned out from under a rock on the vegetation covered west side of the arroyo.

172-173 Crotaphytus collaris two females, each dug out from separate lava outcrops on the South side of the road. Both displayed with mouth gaping when trapped. Mouth lining pink and pharynx dark liver color making a strong contrast with the pink mouth.

174-175 Thamnophis cyrtopsis one captured on the plateau above the arroyo during the late afternoon, and another smaller specimen from under a rock just above the rising water in arroyo. Photo of #174.

In addition to these herps we got the following mammals for Jim Patton:

Notiosorex crawfordi — 1 ♂ from under a rock.

Perognathus goldmani — from under rocks & out at night.

Sigmodon ochrognathus (yellow-nosed Cottontail)

13 July

Sylvilagus auduboni – which we ate for dinner.

Went to bed about 10:30 PM in a ~~thaw~~ slow steady rain which lasted well into the night. The tents were pitched along the road.

July

Woke up to completely overcast skies caused by low clouds. Had breakfast and then packed up our wet gear. Collected the following around the campsite before we left in the morning. Stayed mostly cloudy all morning long.

176 - 185 Sceloporus clarki: Several shot off stone walls and out of trees at late morning when the sun broke through a bit. The lizards hide under rocks at the base or near trees and come out to heat up in the rocks before taking to the trees. ♂♂ have lateral blue belly patches and blue throats; ♀♀ have a small black gular patch.

186 - 203 +204 - 205 Urosaurus ornatus: Off the rocks + trees in and around the arroyo. Much less common above the arroyo on the plateau. More on the rocks at this locality than elsewhere.

Measurements of freshly ~~ne~~ euthanized nine specimens:

3 July

field no.	SVL	TL	sex
195	46	–	♀
196	47	70	♀
197	44	64	♀
198	50	65	♀
199	47	68	♀
200	47	–	♀
201	50	77	♂
202	48	76	♂
203	46	–	♂

206 *Thamnophis cyrtopsis* – small one from beneath a stone on an east facing slope of the arroyo on the south side of the road.

got *Cnemidophorus* + saw *Holbrookia* s.

Left this locality about 1 Pm & drove a short distance to Naco[redacted] Chico. Had lunch & Then headed east on the road to El Rio. Stopped at an arroyo 1.5 miles N.E. Nacori[redacted] Chico Son. and Jim Patten collected a *Bufo mazatlanensis* in an agricultural area. Continued on up into The mountains and Then down into a valley and Rancho El Rio - which is 9.0 miles N.E Nacori[redacted] Chico Sonora by road. It was raining when we arrived but stopped soon & cleared partially. Set up Camp & put up The animals That have been accumulating. Had dinner

207

Carol found all but formed *Bufo* status = 208

-14 July

and then went to a small oxbow pool beside the river to collect the frogs that were calling. Got the following:

Hyla arenicolor: one from the mud shore. Only one heard or seen. No, John got a second. Both prepared as frozen tissue

09-235 Gastrophryne: gobs from in the water. The call is a short introductory "inheep" followed by a longer high-pitched "baa" or trill. Compare with the microhylids heard calling on 9 July 14.6 miles E. Mazocahui. Many more were not collected. This includes the anurans collected by Carol, Philyp & me on the eve. & the 14th.

Specimen photographed.

The locality will be described more fully tomorrow after it is seen in daylight.

+ July

Awoke about 8:20 AM - the latest of the trip so far. Sky clear. Coffee & peanut butter & jelly sandwich for breakfast; then off to collect lizards.

Description of the locality: The area is basically two subareas. The road from Naco de Chico goes east up and over a steep oak-covered ridge and then down into a wide amphitheater-like canyon which faces east. At the bottom of this canyon is the Rio Bonita which drains into the Rio Naco which in turn drains into the Rio Yaqui. The Rio Bonita comes into the amphitheater-like canyon from the north through a rather steep

4 July

Sided canyon. There is a house at the junction of the road & the Rio Bonita & fields at the base of the amphitheater. The amphitheater is rather bare lava on steep slopes. There is little vegetation except for scattered oaks along the several gullies draining the canyon at higher elevations of the canyon. The steep sided canyon of the Rio Bonita & the course of the Rio Bonita through the base of the amphitheater canyon carries a great variety of vegetation, e.g., hickories, ash, sycamores, oaks, cedars, willows on the flood plain (what little there is of it) & opuntia, organ pipe & thorn scrub on the drier canyon walls. The Rio Bonita clearly drains the west face of the Sierra Madre & probably flows all year.

We camped about 200 yds from the road into the Rio Bonita's steep sided canyon.

Got out about 9:00 AM and worked the east facing slopes of the amphitheater canyon first thinking that it would heat up first. Worked above the fields on the dry slopes & along the small arroyos & gullies draining the canyon. John worked the flood plain of the Rio Bonita across the river from the amphitheater. Jim & Carol worked the flood plain of the steep sided canyon near camp. Later in the day we all worked up the steep sided canyon.

The following herps were seen or collected. There was, however, a generally paucity of animals

Pendulum: There large numbers of leaved eliads on the s and around the hitheater canyon.

4 July

236-239 Sceloporus clarki: All four specimens were taken from trees along the Rio Bonita. I saw a fifth specimen, probably this species, run out from under a rock I turned along a small arroyo draining the amphitheater canyon. The lizards are very wary.

240-241 Urosaurus ornatus: seen only on the rocks near the small arroyos & gullies draining the amphitheater canyon

#240 ♂ Throat orange, lateral belly patches deep blue. SVL = 43; TL = 59

#241 ♂ Throat blue, lateral belly patches deep blue. SVL = 45; TL = 48

Cnemidophorus baracoram (costatus group): Fairly widespread but most commonly collected along river bed & lower parts of amphitheater canyon. John Wright took most of the specimens. About a dozen put up as frozen material and about 7 kept alive.

Holbrookia elegans: one got by John Wright.

Rana pipiens group: one from a small pool along the Rio Bonita and another from a stream coming down. Put up as frozen tissue.

1-15 July

Later in the evening Carol, Philyp & I returned to the oxbow pool along the Rio Bavispe in the steep canyon where Jim, John & I had gotten Gastrophryne the night before. The water in the oxbow had gone down a good deal but we got lots of Gastrophryne which were combined with the previous nights' collection. Also got one Rana pipiens group frog — Put up as frozen tissue

July

John went out early and got several (7) Cnemidophorus baraancorum & two Rana pipiens gp. Later I went up the amphitheater canyon to the crest between the Rio Bavispe and Rio Nacori. On the way up I got the following:

241a — Rana pipiens group: one from a pool in a large ~~water hole~~ arroyo carrying water.

242 - 243 — Sceloporus clarki: one (242) from a rock beside the stream at the bottom of a large arroyo and another (243) from a large rock about 3/4 the way up the amphitheater canyon by road

244 - ~~245~~ — Urosaurus ornatus: one ♂ from a dead upright tree about 2/3 the way up the canyon. Throat orange; lateral belly patches blue; SVL = 43 mm.

Cnemidophorus baraancorum: two from near the top of the canyon.

245 — The canyon is covered with young Salix &

15 July

Scattered oaks. There is denser vegetation in the arroyos especially the large one on the south side of the amphitheater.

Photos taken from the crest looking east west into the Rio Bonita drainage & west into the Rio Naco drainage

We met the others at the crest of the Rio Bonita & Rio Naco drainages about 1:30 PM and we continued on down into Naco de Chico for lunch. We essentially retraced our road coming in and got the following Crotaphytus collaris off boulders along the road. going west.

3.6 miles E. Bacadehuachi, Son. (by road)

9.6 miles N. Bacadehuachi, Son (by road)

11.2 miles N. Bacadehuachi, Son. (by road)

12.2 miles N. Bacadehuachi, Son. (by road)

Photo taken of Rio Bacadehuachi from the east side of the valley.

Also saw a large Ctenosaura hemilopha on a rock wall on the northwest side of Bacadehuachi along the road.

Drove to Huasabas where we bought a water melon and shortly thereafter burned the oil filter on a rock. Got as far as west as 1.6 miles W. Huasabas, Son. where the oil light went on & we were forced to camp for the night.

15-16 July

Set mouse traps & went to bed watching a fantastic electric storm to the South.

16 July

Got up at 6:00 Am & ran the traps. Got two specimens Perognathus: baileyi (33) & penicillatus (4). Jim and John walked into Ithuasabas to get oil and I hunted around on campsite. John got a DOR, almost Celeonyx variegatus on the road between camp & Ithuasabas & at our camp (1.6 miles W. Ithuasabas, Son.) I got the following:

246

Urosaurus ornatus: one & two seen in acacia trees in an arroyo on the South side of the camp site.

Holbrookia elegans: on the flats around camp.

Description of camp area. A low shallow grade west of Ithuasabas cut with arroyos. Vegetation consists of palo verde, ~~Ocotillo~~ Fucnaria neomexicana, burrow bush, and there scent of organ pipe. Ground is even stony pavement.

tos of palo verde, tilla & burro bush.

Went into town - putting Jim's car when the oil that we put in ran out immediately. Changed the smashed oil filter at Ithuasabas & had a fantastic breakfast at Ramona's restaurant.

~~West~~ Went down to the Southeast side of

16 July

Huasabas which is mainly an agricultural area between the town and the Rio. Saw or Got the following hunting the fence rows & along the road.

Sceloporus clarki – on the big cottonwoods & tamarisks trees lining the road down to the river. None collected.

247 Urosaurus ornatus : one off a fence post along the road.

Cnemidophorus Sonorae : John got 2

Cnemidophorus opatae : John, Philyp & I got ~~about~~ 10 – 5 frozen & 5 kept alive. Young out.

248 Phrynosoma Solare : John got one in the shade at the base of a fence post.

Found the skeleton of a Spermophilus variegatus in the hollow of tree. Also a large white click beetle with longitudinal black stripes.

Left Huasabas about 1:30 PM and drove to Moctezuma where we had refreshes and then on into Hermosillo where we arrived about 7:00 PM Saw several Crotaphytus collaris along the road SW of Moctezuma and picked up a

249 salmon pink Masticophis flagellum DOR just east of the junction of Mex. Hwy 15 & The (Mex. Hwy. 21) Moctezuma – Ures – Hermosillo road & in that latter road. Specimen has faint cross bands anteriorly. More salmon pink than the Moctezuma a

16-17 July

Specimen collected on 10 July (# 117).

Stayed at the La Enchantada Motel on the north side of Hermosillo and also ate at the motel. Even stayed up with John & Philippo dancing & talking until midnight in the motel's bar.

No geckos seen on the motel's walls.

17 July

Got up about 8:15 AM and spent most of the morning doing chores and getting Jim's bus checked out to make sure we had done nothing more serious than break the oil filter.

Took off east of Hermosillo about noon to find John a Cnemidophorus burti locality. Finally pulled into a rancho 2.8 miles S.E. junct. Mex. Hwy 16 and the Mazatan Rd. on Hwy. 16., Cerro la Agualurca

This is a typically flat part of the Sonoran desert with several isolated mountain outcrops. the latter being the Cnemidophorus habitat John wanted. In particular we worked on and around a small mountain which the ranch owner called Cerro la Agualurca. We saw and caught the following:

250 - 255 Dipsosaurus dorsalis : abundant throughout the flats between the main hwy. & the Cerro. The density was amazing - probably much greater than the Cnemidophorus. The

7 July

animals were remarkably tame but would duck down holes at the base of bushes when pursued. The animals also seemed to run a great distance to their burrows. Did not occur on the cerro. Photo of one specimen. No Chromatic color on any specimen.

256 Sceloporus clarki: John got one large ♂ off a rock in the cerro.

257-258 Callisaurus draconoides: two from the flats near the cerro. Others seen

257 ♂ Throat blush gray; lateral belly patches dark green — These bordered by a small area of salmon pink anteriorly and by yellowish posteriorly.

258 ♀ gular area orange; anterolateral patches orange bordered posteriorly on the sides by yellow; lateral base of tail yellow.

259 Cnemidophorus tigris: many collected on the flats at the base of the cerro. Black throats. Only one pickled — others taken by John Wright for frozen tissue.

Cnemidophorus burti: 2 got ♂ from higher up on the cerro. All taken by John Wright for frozen tissue. The ecological separation between this species & tigris is striking:

17 July.

tigris occurs on the flats and on the lower elevations of the cerro & burti occurs at higher elevations on the cerro.

Photo of habitat of Lignum vitae.

left this locality about 2:00 PM & took the road east to Satuaripa. The paved road runs out east of Mazatan but the dirt road is good. Went on far as Bacanora this day.

Made camp on the south side of the town of Bacanora near the air field. Rain clouds building all around & later we had rain from the north which lasted most of the night as a slow & steady downfall.

Camp was on a gently eastward sloping pan of hard small stone pavement covered with brown bush, leather bush & thorn scrub. Heard frogs calling from from small temporary pools on the north side of the road, between the road & the air strip. Got the following frogs out of these pools during a slow steady rain after dark.

Bufo mazatlanensis: calling from the edge of the water.

Scaphiopus couchi: two different calls given by different animals: one the usual high pitched trill and the other something akin to a finger being rubbed across a wet inflated balloon. The toads were calling from within the water at just above the edge.

260-261

Addenda: Found two Phyllodactylus Solare on the road as follows: #260: DOR 3.3 miles W. Mazatan, Son. (by rd.) and #261: AOR 9.9 miles W. Bacanora, Son. (by rd.)

262-263

264-265

17-18 July

266-271 Pternohyla fodiens : calling from just above the edge of the water.

Went to bed in the same slow steady rain that we had while collecting the frogs. It rained most of the night.

18 July Awoke shortly after 5:00 a.m. & ran the mammal traps that we set out the night before. Caught Perognathus goldmani only.

272 Also caught a Phrynosoma solare as we were pulling out of the camp. (loc. = South side of Bacanora, Son.)

Drove down to the arroyo on the Southeast side of Bacanora, Son. and began working the fence rows, gullies and field edges for Cnemidophorus for John.

The area is largely agricultural fields bordered by several large shallow washes. There are thorn trees in the islands of the washes and along the field edges. Saw or got the following from approx. 9:00 AM - 6:00 PM

272 a-c Sceloporus clarki : generally in the larger trees. Once seen on fence posts that would jump the 2 feet or so between the posts with ease.

18 July

273-276 Holbrookia elegans Primarily along the flat open washes but a few on the less vegetated edges of the fields.

#273 ♂ chest & sides with a yellowish wash; black side blothes surrounded narrowly by bluish gray.

#274 ♂ gular area with a small orange blotch; sides of body yellow; black lateral spots surrounded by narrow tourquoise blue. SVL = 60mm.

277-280 Callisaurus draconoides: concentrated almost exclusively along the dry washes and slightly raised islands in the washes.

These lizards will often run a short distance when first seen and then stop. They can then be approached fairly closely. After they break from this first hold, however, they are much more difficult to approach and will run sooner & go farther than when first encountered.

When they run they carry their tails curled over their backs revealing the sharp black & white pattern on the underside of the tail. When they stop they wave the tail back and forth briefly.

They look like small dogs when they

18 July

rumen. The Mexican name for them is

#277 ♀ gular area orange; anterolateral chest spot orange; sides of body posterior to orange chest spots yellow; sides of tail at base yellow

#278 ♀ gular area orange; anterolateral chest spot orange; sides of body & base of tail with a yellowish wash; SVL = 64 mm

281 Phrynosoma solare : John Wright got this animal.

282 – 291 Urosaurus ornatus : very common on the smaller acacia trees and the fence posts. Very tame and Philip got a good series of photos of a male & female on the same fence post. See back for color notes & measurements.

292 Holbrookia elegans : SVL = 59 mm ; TL = 73 mm. (formalin killed?) ; Venter with a lighter yellowish wash.

Cnemidophorus stictogrammus : many; all taken by J.C.W.

293 Thamnophis cyrtopsis : crawling in a low tangle of vines & bushes ca 2' above ground.

Urosaurus ornatus (probably formalin bolled).

field no.	sex	Throat color	SVL	TL
282	♀	light orange	49	66
283	♀	"	50	49
284	♀	"	51	84
285	♂	orange	52	75
286	♂	yellow surrounded by orange	50	89
287	♂	orange	50	92
288	♂	yellowish green	52	55
289	♂	light blue	52	104
290	♂	orange	50	—

18 July

294-295 Bufo mazatlanensis - both dug out from beneath the litter under wood piles bordering the fields.

296 Pituophis melanoleucus - one seen in a large wood pile next to an open field. Posterior blotches of dorsum were chestnut brown & the ground color was straw colored.

Mammals: Thomomys umbrinus

Left the ~~Banamora~~ Bacanora locality about 6:15 P.M. and proceeded east on the Sahuaripa road. Got ~~[illegible]~~ one Phrynosoma solare as follows: 3.6 miles E. Bacanora, Son. (by road).

297

Pulled off onto the South side of the road at a point 2.4 miles W. Sahuaripa Son. (by road). Had dinner in the rain and dark & then went back west along the road to hunt for frogs & toads. Saw a large Bufo alvarius and collected another small one (#298). Also got a Bufo mazatlanensis (#299) and a Phrynosoma solare (#300) - all along the road. The locality for these 3 specimens (298-300) should be 2.6 miles W. Sahuaripa Son (by road).

298-300

Went to bed w a slow rain which kept

18-19 July

ups well into the night.

Addendum: During our night walk for frogs & toads, we saw a sleeping ♀ Uroseaurus ornatus. She was far out on bare projecting limb of an acacia tree that was hanging over the path. Her tail was extending straight back on the limb toward the base & her head was pointed toward the tip. The back legs were drawn back along the body & the tail & the front legs were bent tight against the limb beneath the chest. Basically she was aligned along the branch & "tucked in" as close to limb as she could get.

Also saw a Hollbrookia elegans when we first pulled into this campsite.

19 July

Arose about 7:00 AM and had breakfast which consisted of a cup of coffee. Went on into Sahauripa and worked on the arroyos and farm fields just N. of Sahauripa. The area is a typical riparian community with large acacias.

Saw and/or caught the following.

301-304 ✓ ✓

Pternohyla fodiens: the town kids got all of these out of cement tanks buried in the ground at what appears to be a tannery. It is within sight of the prison on the north side of town.

305 - 324

Rana pipiens group. Abundant throughout the area. Most small in size.

19 July

Color description: Top of head often green as is also the anterior part of the dorsum. A touch of green is also present just below the dark canthus stripe. Venter immaculate. Posterior parts of thighs often with a yellowish wash.

Others frozen whole by Wright.

325 Bufo mazatlanensis caught by the local boys in the Scuttle tanks behind the tannery on the north edge of town.

326 Kinosternon sonoriense : found by John Wright in a shallow, muddy irrigation ditch near the river.

327 - 331 Sceloporus clarki : widespread on the larger acacia trees throughout the area.

332 - 334 Urosaurus ornatus : widespread and relatively common - but less so than at the last locality of Barancora.

Holbrookia elegans : one seen by John Wright

335 - 338 Callisaurus draconoides : relatively common but again less so than at Barancora. The two smallest specimens appear to be young of the year.

19 July

339-341 Phrynosoma solare : all caught by Philyp & John.

Ctenosaura hemilopha : several seen along the rock wall on the north side of town.

342-347 Cnemidophorus stictogrammus : widespread throughout but again not as common as at ~~Bacanora~~ Bacanora.

348 Rhinocheilus lecontei - one found by the boys in the tannery tanks. Very little red in the light interspaces.

349 Masticophis flagellum : Caught by J.W. about meters up a tree. Color: Salmon pink below & tannish pink above with slight darker cross bands evident throughout but more so anteriorly than posteriorly.

Thamnophis cyrtopsis : a large one seen by J.W.

Jim Patton got the following numbers:

Thommys umbrinus -6

Peromyscus aureomicus -1

left the locality about ~~[illegible]~~ 6:00 PM & had dinner at a hotel restaurant on the north side of town. Stayed until 9:30 PM drunk, talking & listening to a three man band and then went back out to our campsite & last night. It began raining about 7:00 PM and continued for most of the early evening.

20 July

20 July

Up at 6:20 Am to an almost completely overcast sky. Waited a long time for the tents to dry out, and during this time we walked around the area west of the camp. Saw three Urosaurus ornatus, but only one caught. Also saw a bunch of small black tadpoles in a pool of an arroyo.

SVL=50; TL=88; throat orange

Finally left the camp site and drove back into Sahuaripa to pick up the road south to Yécora. Went as far south as the cutoff to which we took for 9.3 miles to the east. This locality is 11.6 miles S.E. Bamori, Son. (by road).

We went as far as we could on this road before it got so bad that we couldn't go on.

The area is very steep hills & mountains on the east side of the Rio Sahuaripa. The area is a mixture of oaks & tall deciduous trees and certain desert elements from lower elevations, e.g., Opuntia & acacia. We worked mainly along the road cut and along the arroyo on the north side of the road.

We saw or caught the following:

350-351 Sceloporus clarki: four seen but only two caught. Three were on rocks and one was on the ground and ran to rocks.

352-353 Anolis nebulosus: both of them ♂♂ were collected off twigs of downed trees alongside

20 July

The road cut. They were very easy to catch.

Color description in life: Both light chestnut brown above & lighter below with the faintest indication of a light lateral stripe; dewlap orangish-red; post. directed chevrons a touch.

354-355 Eumeces callicephalus: both taken by J.W. for chromosomes & tissues.

356 Eumeces: taken by J.W. for chromosomes & tissues

357-358 Cnemidophorus baueri coeruleus: four seen but only two caught.

359 Tantilla yaquia: one from under a downed dead oak trunk on the north face of the small arroyo on the south side of the road.

Color description: light neck collar off-white; belly orangish-red.

Left this locality about 2:00 PM and started back down the road. ~~Had a flat tire~~ Picked up

360 a ROR Pituophis melanoleucus 10.7 miles S.E. Bamori, Son. (by road). Continued on until we heard a flat tire 4.0 miles S.E. Bamori, Son.

361 when John Wright shot a Urosaurus ornatus. Continued on into Sahuaripa. On the way saw lots of Holbrookia elegans on the rock fence just south

20 July - 21 July

362 of Arivechi. ~~Had~~ Also picked up a Phrynosoma Solare 4.4 miles South of Sahuaripa, Son. (by rd.). Had dinner at the same hotel as the night of the 19th.

Took off late in the afternoon back over the road to Mazatan + Hermosillo. Camped somewhere west of Banori and had just a few sprinkles during the night. There were more mosquitos than any other night.

Took a photograph of the Banori valley + the town itself.

21 July Up at 6:00 AM but didn't get off until about 7:15 AM. Continued west on the same road. Stopped at a point 13.0 miles E. El Novillo, Son. (by road). The area is a small east flowing arroyo and we stopped to look for gophers. Saw no gophers but did get a few the following herps.

Hyla arenicolor: J.W. claims to have seen tadpoles of this species in the arroyo.

363 KINOSTERNON SONORIENSE: J.W. found the shell and partial skeleton (including the skull) of a specimen.

364 Sceloporus clarki ♂ SVL = 104 mm; TL = 125 (in life). Gular area torquoise blue surrounded by black — black continues dorsally on front of shoulder to make a partial collar. Lateral belly patches also torquoise blue, bordered medially by black, midventral area immaculate; sides of tail light torquoise blue.

21 July

Continued west on the road to El Novillo, Son. where the Mazatan road crosses the Rio Yaqui. Had lunch and then spent the rest of the day working the river valley south of the bridge and east of the river. There is a gravel sorting business over much of the area, hence there are extensive piles of sorted gravel devoid of vegetation. Otherwise there is a fair of pasture land & some farm land higher up from the river proper. Very close to the river there are several isolated pools of water trapped in the bedrock. Day was cloudy.

During both the afternoon and evening we got or saw the following: E. side of Rio Yaqui, just South of El Novillo, Son

365 - 366 Bufo mazatlanensis: all of the larger specimens were seen only on the sandy/grassy bank next to the river. None were seen on the gravel banks above the river. There were, however, thousands of newly transformed toadlets, that were probably of this species, along the banks of the river - both the sandy, grassy bank & near the pools & the bedrock.

367 - 369 Scaphiopus couchi: Seen only on the gravel terrace above the river. Others heard calling at night.

Pternohyla fodiens: many seen & heard around the pools in the exposed bedrock above the river.

370 - 375

21 July

376 - 379 Gastrophryne : heard & caught several single individuals around the pools in the exposed bedrock along the river. Call consists of but a single high pitched "bugg". Unlike the call of the individuals heard on 9 July; not like the call of those heard & caught on the 13-14 July which were preceded by a "wheep."

Sceloporus clarki : several seen in the big trees along the river, but none taken.

Ctenosaura hemilopha : J.W. saw one along the river.

380 - 389 Urosaurus ornatus : many seen on rocks, trees and "domed" fence posts, Mostly on rocks however.

#	Sex	SVL	TL	Throat color
	♀	50	–	pale salmon
	♀	49	–	light orange
	♀	49	–	orange
	♀	50	75	pale salmon
	♀	48	79	faintest light salmon
	♂	44	–	mustard yellow
	♂	45	80	light green
	♂	46	74	greenish yellow
	♂	49	–	orangish yellow
	♂	49	86	light orange

21 July

390 - 397a Callisaurus draconoides : extremely abundant on the flats above the river — in fact in the entire area between the river and the canyon walls. Curiously, however, we did not see a single specimen of Holbrookia elegans.

398 Phrynosoma Solare : Phlyp found one out at night around the pools in the bedrock above the river when we were hunting for frogs.

399 - 404 Cnemidophorus ~~costatus~~ Stictogrammus Many seen throughout the area from the river to the canyon walls.

405 Masticophis bilineatus : one caught while resting on a rock. ~~a~~ Sky cloudy — otherwise he would have been 'basting'.

Turtles : Several seen in a shallow cul de sac of the river after the water level in the river fell about 2 feet. Probably Chrysemys (Pseudemys) ~~s~~ scripta yaquia. Actually seen on the morning of the 22 July.

It remained cloudy all day long & at night as well. It rained several times during the night.

22 July

22 July

Up about 7:15 Am. Skies completely overcast as it was yesterday. Walked along the river where we saw the turtles & then checked out a box canyon feeding into the river valley. Saw nothing but a few Urosaurus ornatus.

Went over to the west side of the Rio Yaqui just south of El Novillo, Sonora so that Jim could check the gopher situation and compare it to the east side. He got Thomomys umbrinus on the west side just as he had gotten it on the east side. I did a bit of tramping along the river and either saw or caught the following.

406 Sceloporus clarki: several seen on the trees and this one specimen taken off the rocks.

407 - 417 Urosaurus ornatus: many seen. very common. The lizards seem more wary & harder to catch on both this side of the Rio Yaqui & the other than at other places. Got the following series off the wooden railings & a corral.

Field No.	Sex.	SVL	TL	Throat color.
407	♀	48	46	orange
408	♀	49	–	faint orange
409	♀	50	84	faint orange
410	♀	49	71	yellow
411	♀	54	87	orange
412	♀	51	66	faint orange
413	♀	51	79	faint orange
414	♂	51	53	yellow

22 July

Urosaurus ornatus (Cont.)

Field No.	Sex	SVL	TL	Throat color
415	♂	55	-	Orange
416	♂	51	51	yellow-orange

418 Ctenosaura hemilopha : one shot by a local kid off the same corral as the above Urosaurus was on.

419 Callisaurus draconoides : a few seen in the more open spaces on the terraces above the river.

Cnemidophorus stictogrammus : several seen. Two taken alive and given to J.W. for tissue

Left the Rio Yaqui and drove on to Hermosillo on the tail of a large Thunderstorm that left lots of running water. Ate at a steak house in Hermosillo & then headed north on Mex. Hwy 15. Stopped at two localities to hunt for geckos as follows:

6.7 miles N. Hermosillo, Son. via Hwy. 15.

Boulders on the ~~left~~ west side of the road. ~~Found a~~

420 Found one Phyllodactylus homolepidurus and one

421 Crotalus molossus.

19.1 miles N. Hermosillo, Son. via Hwy. 15

Uplifted hill on the west side of the hill behind the truck stop. John Wright found Phyllodactylus and one Sceloporus clarki - this last Sleeping on the rock face of a boulder.

22-23 July
24 July

Continued north on Hwy. 15 through some really heavy Thunderstorms, Stopped at about 2:00 AM at a point about 20 miles South of Nogales for the night. Overcast but no rain was over except for a few final drizzles.

3 July

Awoke to overcast but clearing skies. Had coffee and then headed north to Nogales, Ariz. where we had breakfast and got our permits checked out. Drove north to Tucson & dropped in at Jan's house. Stayed there all afternoon and early evening & after dinner left for Los Angeles.

24 July

Drove all night through the deserts of Western Arizona & S. E. Calif. and arrived at John Wright's house in L. A. about 8:30 AM. Napped there until about 2:00 PM and then headed north for Berkeley. Had a blazing hot drive through the Central Valley and arrived in Berkeley very tired about 10:30 PM.

5 9:89

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